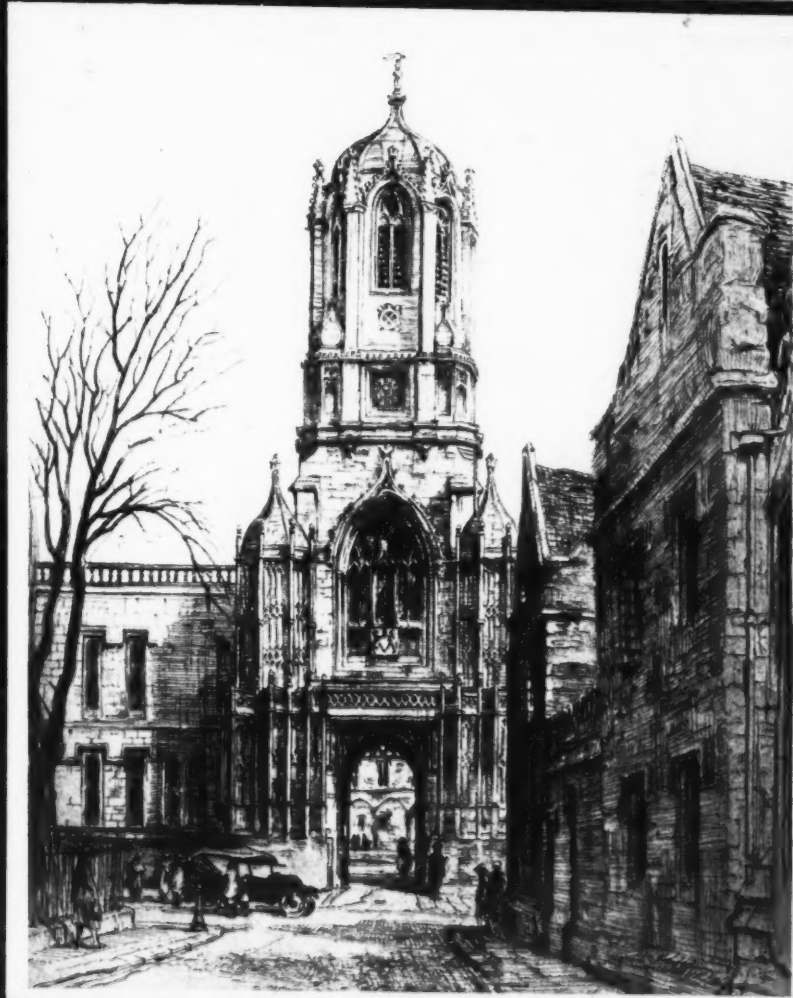


OCT 5 - 1933

THE AMERICAN School Board Journal

A Periodical of School Administration



The Bruce Publishing Company

MILWAUKEE

NEW YORK

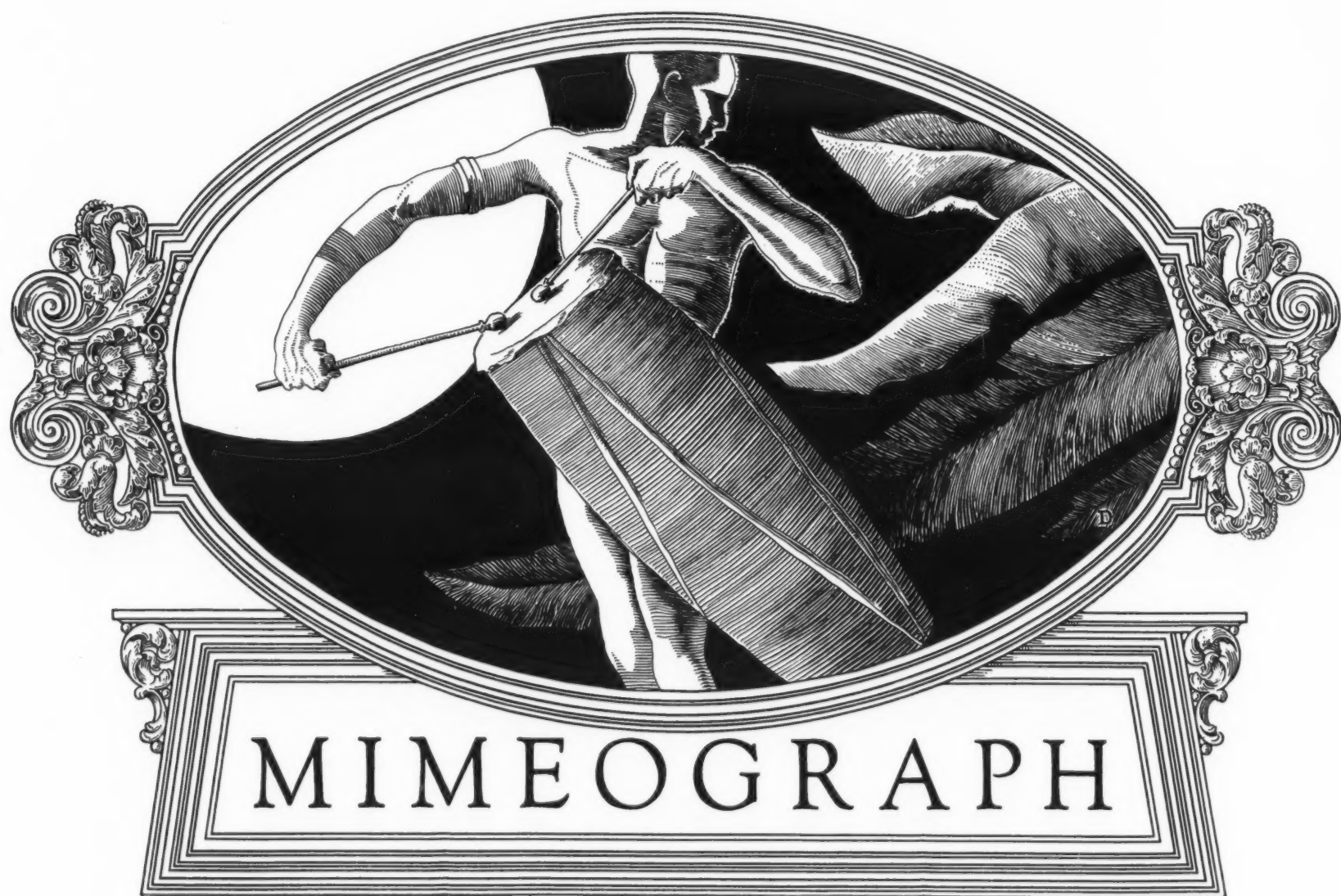
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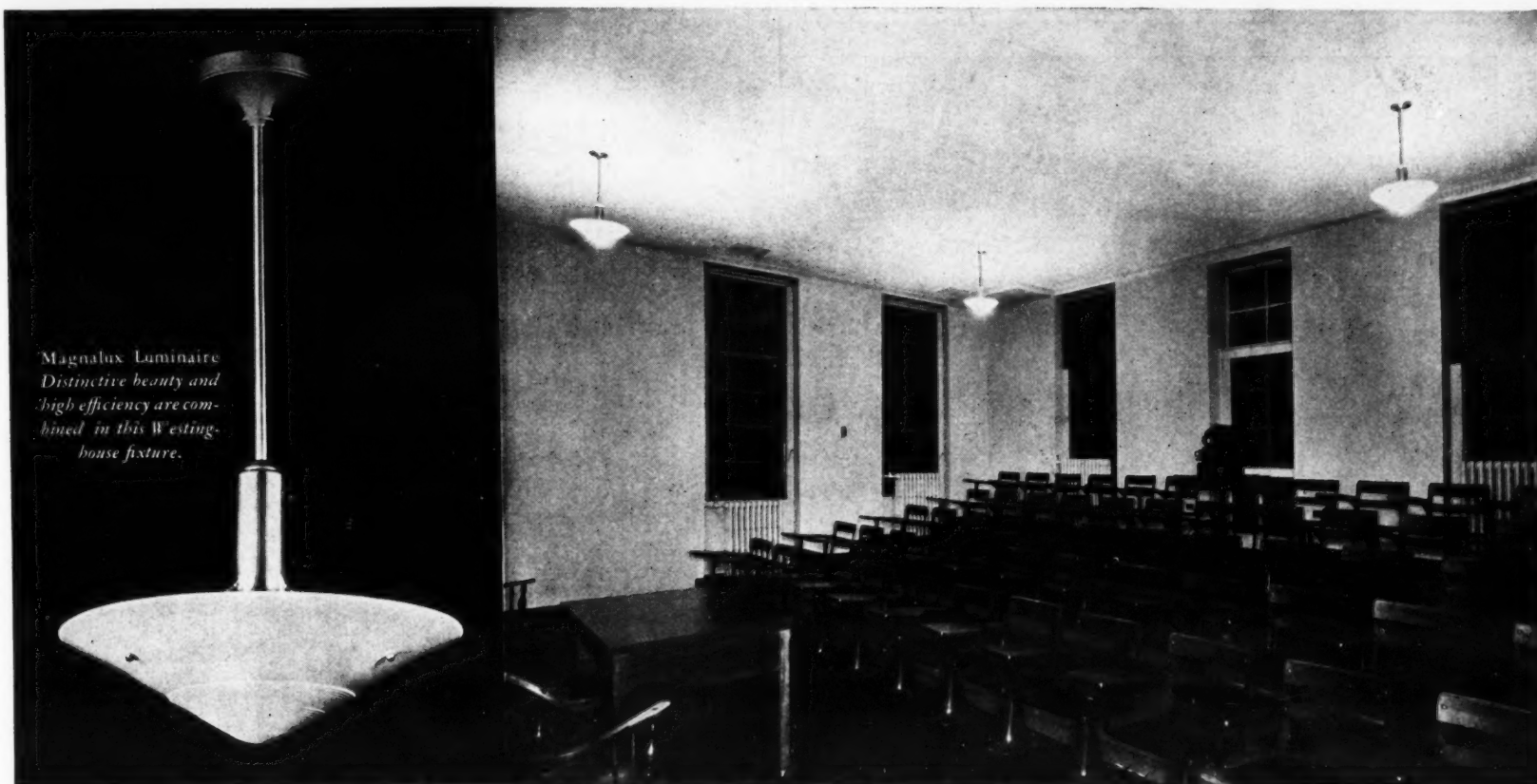
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Volume 87, No. 4

OCTOBER 1933

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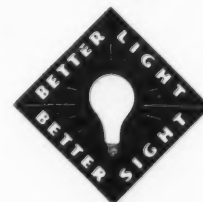
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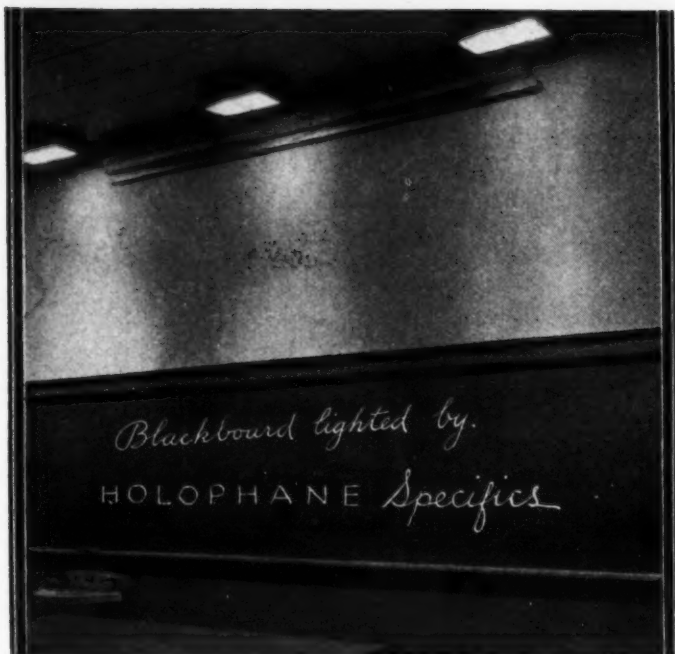
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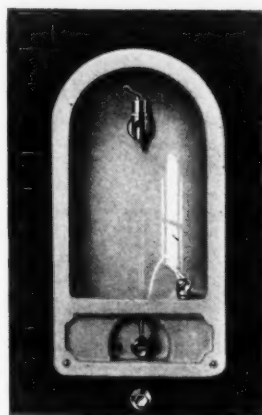
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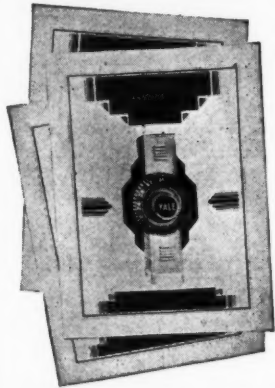
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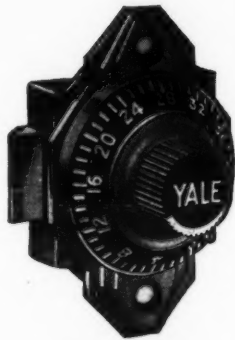
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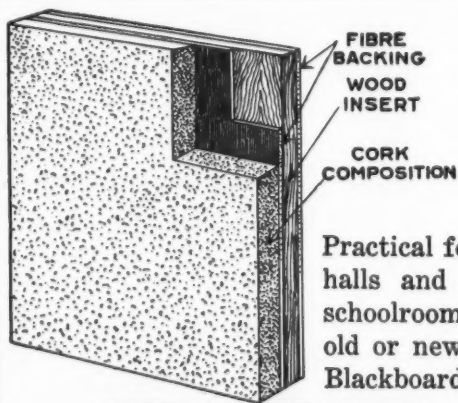
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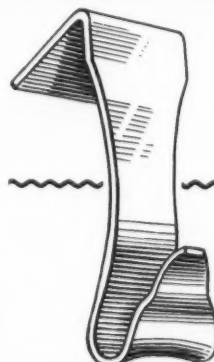
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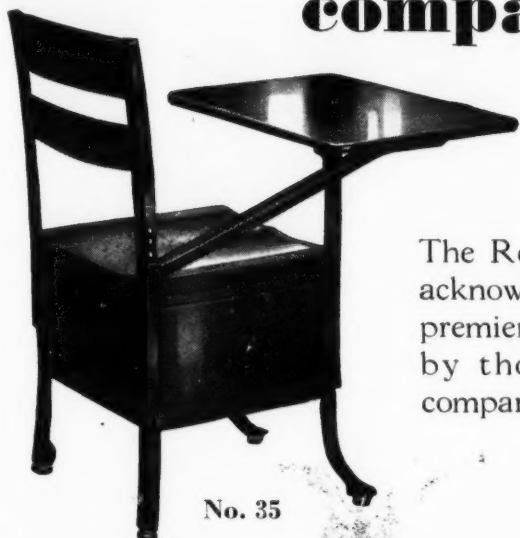
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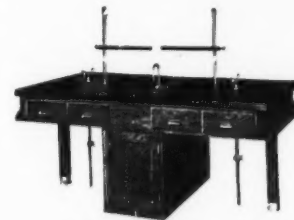
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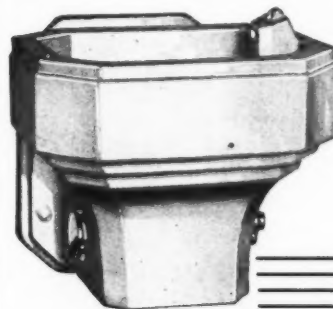
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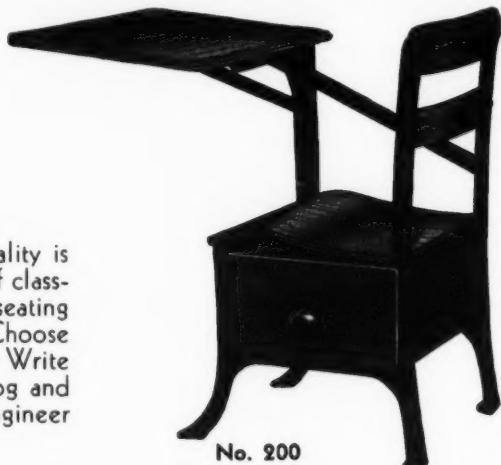
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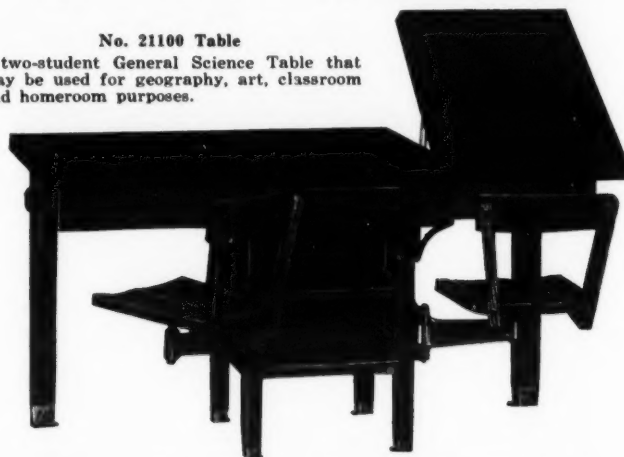
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Under-nourished Children

That there are under-nourished children in a nation of abundance and plenty is tragic. The inclination to think of under-nourishment in terms of bodily needs is universal. There is another phase of under-nourishment that is pressing itself upon the public mind.

The school child who, as the result of deletions from the curriculum, cannot find subject matter that has special appeal to his interests is under-nourished.

The child who is under the instruction of a teacher beset with financial worries cannot get the best from the personality of the instructor and is under-nourished psychologically.

The child who is denied teaching helps as an economy measure is under-nourished educationally.

The school system that is in a state of depression atmosphere is lacking the cheer and buoyancy so essential to child happiness. A child in such an environment is under-nourished socially.

In considering under-nourished children, closer attention must be given to educational, social and physical under-nourishment. Financial support necessary to furnish these essentials should no longer be withheld from the schools.

Child labor has gone.

Under-nourishment of the child in every phase should go also.

On every hand may be seen specimens of adult social wrecks—no credit to city or town. They are the results of under-nourishment in some phase of their training in early years.

To eliminate the ever-increasing army of adult social wrecks, childhood must be saved from under-nourishment of those elements that contribute to a rich and complete life—for life consists of more than bodily nourishment.

That community which permits, through curtailed education, under-nourishment in children, defaults in its obligations to childhood.



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The Sky Is Brightening

The National Recovery Act provides, among other things, federal aid for public works projects. While the act contemplates the construction of sewage plants, waterworks, highways, and bridges, it also includes the construction of school buildings.

Wherever the need for more school-housing is properly demonstrated the federal government will come forward and advance the necessary funds. It will grant an outright gift of 30 per cent and exact bonds for the other 70 per cent.

Every unit of government, state, county, municipal, town, or village, may carry on its construction projects in its own way. The government is merely concerned in the fact that the projects are efficiently and honestly carried out, and that the unit of government demonstrate its ultimate tax ability to repay the obligation engaged in.

The supposition is that, if the several school authorities come forward to avail themselves of the aid afforded by the federal government, the pressure for more school accommodations will readily be met.

In that case it may also be assumed that fully 10 per cent of the \$3,300,000,000 appropriated, namely, something like \$300,000,000, will go for new school buildings. In the matter of employment preference will be given workmen residing in the localities where the construction projects are engaged in.

Those who are in pressing need for more schoolhouse accommodations should apply to their respective state public works. Response will follow.

THE EDITOR

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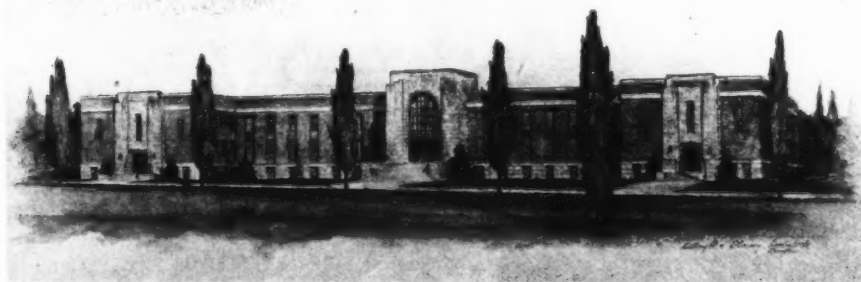
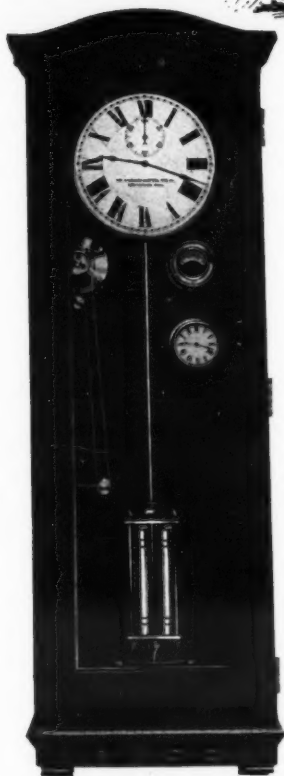
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UNCLE SAM COMES FORWARD TO HELP THE SCHOOLS!

Illegal Contracts for Reduction of Teachers' Salaries

Daniel R. Hodgdon, Esq., New York, N. Y.

During the past year many boards of education, acting on the advice of municipal attorneys or other practicing lawyers, have written contracts for teachers calling for a deduction in salary below the legal schedule to which the teachers were entitled. All these contracts which have come to the attention of the writer have been illegal and unenforceable, usually because the attorney to whom the board of education went for advice, made the fatal mistake of believing that a board of education has the same contractual powers as any other quasi-corporation or a municipal corporation.

Making contracts of this kind are *ultra vires* acts, as far as the board of education is concerned, since it has no power to make such contracts. The board of education is a governmental agency, not a private contractor. Its powers, its duties, and its contracts, expressed or implied, are only such as the law permits and provides for.

The attorneys advising the board have overlooked the fact in most cases that a board is a quasi-corporation with very limited powers. They are agents of the legislature, created by the legislature to carry out the will of the legislature concerning certain details of education.

The contractual powers of a board of education are limited to the express provision of the statute. All acts of a board of education are governed by the express will of the legislature. In other words, a board of education, strictly speaking, is a servant or agent with limited authority and no discretionary powers, except those which may be necessarily implied. It can make no contracts which are not provided for in an act of the legislature. It can perform no acts outside of the expressed direction of the legislature.

Power of the Board to Contract with Teachers

No board of education has the power to contract with a teacher for a reduction in salary, where the salary schedule has been fixed by a definite provision in the statute. Neither has the teacher the right to contract for less than the amount of salary to which she may be entitled. In other words, a board of education has little of the character of a municipal corporation. Attorneys should keep carefully in mind the limitations upon boards of education, before advising them as to the legality of contracts which violate statutory provisions pertaining to education. When a teacher is employed at a certain scheduled salary provided for in the statutes, neither the board of education, nor the teacher, has any control whatsoever over the changing of this salary. To a certain extent this may be compared to a marriage contract; neither party has any choice in the matter of changing the terms. Changing of terms is a matter that concerns the state, not the parties involved.

In many cases the board is liable to suit for the collection of the deduction which has been made from a teacher's salary. This would produce a serious condition in the State of New York, were it not for the fact that the last legislature passed the Fearon Act which makes these donations legal as far as the matter of future donations is concerned without jeopardy to retirement and pension status.

Legality of "Donations"

There is some doubt as to the constitutionality of the *ex post facto* part of the statute respecting past donations and, if it is not operative according to the holdings of the New York courts, it would seem that all teachers who have donated a part of their salaries to boards of

education may sue and collect such monies. It is furthermore quite possible that members of the various boards may be held individually liable, where there are no funds to pay back these so-called donations.

Many boards of education have made a serious mistake in taking out certain percentages of teachers' salaries at the source. That is, they have deducted a certain percentage of the teacher's salary before the salary was paid to the teacher. Many of these provisions have been passed upon by municipal attorneys and in some cases even written by them. The following provisions in cities where a certain fixed salary schedule and retirement rate are in force are beyond the power of a board of education in the State of New York.

Such provisions as the following have been found in contracts which have come to the writer's attention:

For value received, I, the undersigned, do hereby sell, assign, transfer, and set over unto the board of education, a sum equal to 19.2858 per centum of my compensation from said board of education, payable for and during the period commencing September 1, 1933, and ending June 30, 1934, the monies so set over and assigned by me to be credited to unexpended balances as set forth in Section 62 of the charter of the said city, or to the 1934 Estimated Revenue of the said board of education, as the case may be.

In another such assignment the board of education has adopted the following provision:

In consideration of a majority of the number of teachers entering into agreements similar to this agreement, and for other good and valuable considerations, I, the undersigned, hereby sell, assign, transfer, and set over unto the board of education, a percentage of my salary equal to and in all respects the same as the percentages of reduction set forth in the schedule in the law adopted at the recent special session of the Legislature amending Section 889-a of the Education Law of the State of New York, a copy of which schedule is hereunto annexed. Such deduction shall be made from my compensation by the said city for and during the period beginning January 1, 1933, and ending December 31, 1933; the money so set over and assigned by me to be credited to the 1933 estimated revenue of the board of education of the city.

These contracts have further provided for conditions such as the following:

I do also authorize and empower the director of finance, in my name and as my agent to deduct from each payment due me, weekly, semi-monthly or monthly, as the case may be, during the aforesaid period, a proportionate share of said sum as is hereby assigned and set over by me and to deposit the same to the credit of the estimated revenue of the board of education of said city for the year 1933 in my place and stead with like effect as if done by me, and I do hereby confirm and ratify his action in so doing.

It is understood that my entrance into this agreement is voluntary on my part and is not to be construed as a change in my compensation as fixed by the board of education of the said city or otherwise by law.

It is further understood that this assignment is not to be effective unless and until the said board of education shall adopt a resolution accepting same and a certified copy thereof filed in the office of the director of finance.

It is further understood that the said board of education shall have the right to determine by resolution the amount of my salary which shall be deducted as hereinbefore set forth not exceeding the said percentage hereinbefore set forth, and also by resolution the right to determine for what period or periods such deductions shall be made, said period or periods not to exceed the period hereinbefore set forth.

This gift shall not operate to diminish the amount of my pension or retirement pay to which I am or may hereafter be entitled, and on the computation of my said pension there shall be included as my annual salary, the full amount of my compensation undiminished by the amount of this gift, and the board of education, by the acceptance of this instrument hereby covenants and agrees to save and hold me harmless from any loss or diminution of my said pension or retirement pay occasioned hereby, and agrees and pledges its good faith that my salary during the time of this agreement shall not be reduced directly or indirectly except as above provided.

Such contracts as those presented are *ultra vires* acts beyond the power of the board of edu-

cation to make. The teacher has no power to sign or make such assignments to boards of education, since salaries are fixed by statute, and no one has the right to sign away his statutory right. A teacher's right to a certain compensation can be altered only by statute, or some other act of the legislature.

Reduced Salaries and Retirement

The last paragraph in the agreement attempts to defraud the state. It is not possible to call the salary prescribed in the salary schedule the annual compensation of a teacher when, as a matter of fact and of record, the teacher has contracted to return part of the salary so scheduled.

In New York and in several other states this contract would further violate the Education Law, which requires boards of education to pay the salaries set forth in the schedule on file. The retirement board is required to use the annual compensation of the teacher when computing matters concerned with retirement.

A statement to the state department under oath would be perjury if the amount of salary were stated above that actually received by the teacher. The Fearon bill in New York does not permit such assignments, nor does it in any way authorize them. The said bill merely legalizes donations from teachers, giving them the right to donate a portion of the stated salary. It authorizes the right of a teacher to make a contribution, but it does not compel such contribution. It is purely optional with the teacher in question. Certainly no deduction of salary can be made at the source. The teacher must receive her full amount of salary and, if she so elects, may return a portion of it to the board or school district, without jeopardy to her salary, pension, or retirement rights.

In certain cases, boards of education have asked for donations from teachers on the ground that there were not sufficient funds in the budget to cover the salaries. Later these boards have had a surplus. There can be little doubt but that the teachers under such conditions have an equity in the surplus, since the donation was obtained under a false representation. It would seem that teachers under such a situation have a right both morally and legally to a *pro rata* division of the surplus, since their contribution was made with the understanding that there would be no surplus.

Boards of education, or other boards of school control, are limited in their authority to contract not only by the general principles of the law of contracts, but also by the scope of their authority. They may exercise only such powers as are expressly or impliedly conferred upon them by law, or such as necessarily grow out of the purpose of their creation. The school district itself is a quasi-corporation, an agent of the state legislature, authorized to exercise limited governmental functions. A school board has not such wide scope of contractual powers as private parties or municipal or ordinary corporations that are free to make contracts of all kinds as long as they do not violate the law or public policy. The purpose of the school board is to exercise purely governmental functions. Its contractual power is found in the law of the state in which it exists, and the limitations of its power as to the subject matter and the mode of contracting are found in the statutes. It would follow then that boards of education have no power to make contracts for the reduction of teachers' salaries, where the statute does not give them such a power, either directly or through implication. This is especially true where there are statutes which provide for definite increments, pensions, and retirement.

Educational RESEARCH at the Crossroads

Max D. Engelhart, Formerly of the Bureau of Educational Research of the University of Illinois

The depression has resulted in large-scale and nationally distributed economies in education. It has caused the hasty inauguration of policies of economy to meet the demands of taxpayers and the exigencies of decreased revenues due to the nonpayment of taxes. These economies include reduction of school terms, salaries, and numbers of individuals employed, building operations, curriculum offerings, guidance programs, and educational research activities. Many of the current policies of economy are excessive in character from the point of view of permanence. They are expedient for a time, but if too long prolonged may defeat the ends they are expected to accomplish. The economical attitude is a desirable one in future and more prosperous years. It should be accompanied, however, by the desire to evaluate critically and systematically all educational services for the purpose of retaining those whose contribution to our national life justifies their cost.

It is the purpose of the writer to indicate something of the status attained by educational research prior to the depression, to show some of the effects of the depression on educational research activities, and to give his answer to the question: What should be the policy of schools relative to educational research in the future?

The Status of Research Prior to Depression

In the years prior to 1929, educational research attained "quantity production." The trend is indicated by the number of theses submitted for the degree of doctor of philosophy in education. From 1918 to 1922, inclusive, the average number per year was 55, and 68 for 1922 was the largest. In 1923, the number climbed to 94, and in 1924 to 181. Comparable data are not available beyond 1927 in which the number of theses was 189, but the size of the annual bibliographies of educational research published by the United States Office of Education shows that the number of investigations has continued to increase. The bibliography for the year ending July, 1928, included 1,540 titles. The one for the period from July, 1929, to September, 1930, included 4,651 titles.

The annual expenditure for educational research since 1917 has never been calculated, but the amount is evidently very large. Announcements of appropriations and donations of more than three million dollars specifically designated for research in education appear in the 1926 issues of *School and Society*. Announcements of more than a million dollars appeared in the 1927 issues of this journal. Furthermore, there were undoubtedly many expenditures of the type announced which received no publicity. With reference to the research represented by the bibliography for 1930, published by the United States Office of Education, an editorial in the January, 1932, issue of *School Life* asserts that, on a conservative basis, the 4,651 studies listed represent a total expenditure of time and money of not less than \$10,000,000.

The number of research bureaus in city school systems greatly increased in the years prior to 1929. The report of the New York School Inquiry, 1911-12, included a recommendation that a "Bureau of Investigation and Appraisal" be established. As a result of this recommendation, a Division of Reference and Research was established in 1913. Similar departments were organized in other cities: Baltimore, 1912; Rochester, N. Y., 1913; New

Orleans, 1913; Boston, 1914; Kansas City, Mo., 1914; Detroit, 1914; Schenectady, N. Y., 1914; Oakland, Calif., 1914. In 1927, Chapman¹ reported a total of 69 bureaus of educational research in city school systems. The increase in the number of bureaus of educational research in state departments of education, teacher-training institutions, and in departments or colleges of education of universities has been comparable.

The large-scale production of research studies in education has resulted in a number of notable contributions to the theory and practice of education. Several of the more important groups of studies may be mentioned: The genetic studies of genius and the investigations of "Nature and Nurture" published as the *Twenty-Sixth Yearbook of the National Society for the Study of Education* by Terman and others; the Chicago reading studies appearing in the *Supplementary Educational Monographs* and conducted by Judd and his associates; the Educational Finance Inquiry of which Strayer was director; the Measurement of Intelligence by Thorndike and others. Research studies of less prominence, but of value, have appeared as Teachers College, Columbia University, Contributions to Education, in bulletins and monograph series of other colleges and universities, in occasional publications of state departments of education and city school systems. The volumes of various technical educational journals contain many reports of worth-while research.

While a large number of the research studies published in the past few years may be justifiably classified as contributions, it is probable that the majority of them have contributed little in the way of dependable educational principles. A few years ago, the writer, under the direction of Professor Walter S. Monroe, analyzed the volumes of the *Journal of Educational Research* from January, 1920, to June, 1927. Out of a total of 467 articles, 72, or approximately 15 per cent, appeared to qualify as experimental investigations in which an attempt was made to evaluate a method of teaching or some other procedure relative to instruction. These 72 reports of experiments were classified under three heads: (1) research techniques satisfactory, or open only to minor criticisms; (2) research techniques reasonably satisfactory but generalization not justified; (3) research techniques open to such serious criticism that the conclusion is not dependable. Only 5 out of the 72 articles were placed in the first group; 20 were assigned to the second; and 47, nearly two thirds, were listed as being open to such serious criticism that the conclusion could not be accepted as dependable.² It should not be inferred from this analysis that the research reported in the *Journal of Educational Research* is inferior in quality to research reported elsewhere. Other critical evaluations, unrestricted with respect to the place of publication of the research, have resulted in similar conclusions.

Survey Type of Research

These estimates of efforts to determine the relative merits of methods and materials of instruction present a rather pessimistic picture. This type of research, controlled experimenta-

tion conducted under school conditions, is among the most difficult to accomplish successfully. Hence, it seems desirable to present an estimate of the quality of a less difficult and more prevalent type of research—the survey or fact-finding type. The following topics are typical of the problems investigated in survey studies: library facilities of teacher-training institutions; duties of elementary-school principals; laboratory equipment in small rural high schools; present practices in public-school plumbing equipment; reading interests of high-school girls; provisions for individual differences employed in secondary schools; salaries in city school systems; achievements of junior-college freshmen; and the distribution of intellect in the ninth grade.

In numerous instances, reported investigations of the survey or fact-finding type have made valuable contributions to our knowledge of education. It is not unreasonable to suppose that studies like the Educational Finance Inquiry, Heck's study of child-accounting records, Norton's investigation of the ability of the states to support education, and Count's study of the selective character of American secondary education, have caused significant changes in our thinking about education and consequent improvement in educational practices. Unfortunately, only a small proportion of the fact-finding research has been so excellently conducted.

The writer can report no quantitative analysis of a representative sample of survey studies. On the basis of extensive critical reading it seems justifiable to conclude that much and probably most of the research of the fact-finding type is open to the following criticisms: (1) Most of the problems investigated are trivial. The studies too frequently give the impression that they were stimulated by curiosity, or the desire of finding an easy way of meeting thesis requirements, rather than by real difficulties encountered in educational practice. (2) The data of many studies are not representative of the practices and conditions they are supposed to portray. Many of them have dealt with a small area and, hence, the conclusions are not generally applicable. In studies where a large area has been covered by a process of sampling, there is frequently uncertainty concerning the representativeness of the data secured. (3) The techniques used in collecting data are too often inappropriate, inadequate, and unskillfully used. An excessive use has been made of the questionnaire in collecting data. Too frequently these instruments have been poorly constructed and carelessly used. Not enough use has been made of the more reliable and laborious observation and interview techniques. (4) In many instances the data are not organized in ways which will reveal their true significance. Figures and charts are reported which exaggerate conditions. Tables are given with insufficient explanations in the contexts in which they appear. Frequently, items of data are compared which have not been reduced to comparable bases. Most serious of all, the data are not interpreted with full recognition of their limitations.

Research of the survey type, even when excellently done, is of but limited applicability to the educational practices of a given school system. Let us suppose that a conclusion dependably indicates that which is typical of a given practice. It is helpful to the superintendent of a given city to know that conclusion, but he is not justified in attempting to conform to the practice without consideration

¹Chapman, H. B., "Organized Research in Education," *Ohio State University Studies*, Bureau of Educational Research Monographs, No. 7. Columbus: The Ohio State University Press, 1927, pp. 210-211.

²Monroe, W. S., et al., "Ten Years of Educational Research," *University of Illinois Bulletin*, Vol. 25, No. 51. Bureau of Educational Research Bulletin No. 42. Urbana: University of Illinois, 1928, pp. 79-82.

of his own unique situation. Furthermore, the conclusion indicates merely "what is" rather than "what should be." It may be more desirable from the standpoint of educational progress in his own community for the superintendent to use a different practice or a modified form of the typical one.

An important recent trend in educational research should receive mention. Approximately ten years ago, when "quantity production" was first attained, there was a widespread faith in objective methods. In a number of reports of research and to a greater extent in general discussions of educational topics, it is apparent that writers believed that if an investigator employed only objective data, his conclusions were indisputable, and, conversely, that if his data were lacking in objectivity, the conclusions were not dependable. In recent years the faith in objective methods has diminished. There has come a growing recognition of the importance of assumptions and other subjective aspects of research. It is evident that investigators have become more critical of research techniques and more alive to their possibilities and limitations. Furthermore, critical writings pertaining to research in education are more numerous now. It would seem justifiable to conclude, therefore, that educational research is approaching maturity. With the possibly inevitable mistakes of the pioneer period behind and with improved techniques and increased scientific attitude attained, educational research can contribute more dependable findings in the future.

Effects of Depression on Research

The preceding paragraphs have indicated something of the status attained by research in education prior to the very recent years of depression. It is not possible at this time to present a clear picture of what the depression has done to educational research. The publication of reports naturally lags behind the actual research. Hence, the volume of reports still appears relatively undiminished. The first years of the depression brought increased attendance in graduate schools of education with consequent increased numbers of theses and published reports of theses. The reduced enrollments of the past year have not as yet made an apparent decrease in the number of theses. There are many evidences, however, that educational research activities are now being seriously curtailed as a result of economy programs.

The staff members of many city bureaus of educational research have lost their positions. Fortunately, in numerous instances, these individuals have been given instructional positions in the school systems of which their bureaus were departments. The same thing has happened to the staff members of many bureaus in teacher-training institutions and in universities. In one instance, a university bureau which employed five research workers, two of which devoted a small portion of their time to teaching, has been reduced to a staff of two workers, the director and an assistant. The director now gives a larger proportion of his time to teaching. In another instance known to the writer the entire staff has been eliminated and the director retained by his institution only in the capacity of a part-time instructor.

The great foundations have had their dividends curtailed and the fortunes of philanthropists have been subjected to deflation. Hence, the report of a grant or subsidy for research in education is rare in current educational journals. The writer presents no novel information when he states that these activities have been subjected to much retrenchment in public-school systems and in higher institutions of learning. The fact of the retrenchment is well known, as is also the fact that under present conditions it is unavoidable. It is not

inappropriate, however, to consider what should be the policy of schools relative to educational research in a more prosperous future.

Policy for Research of the Future

In seeking the attainment of the two objectives, progress and economy, all educational services and functions must be evaluated critically and systematically. Such a program of systematic and critical evaluation presents numerous research problems. A trend in education which has recently encountered much adverse popular criticism is that of extension and diversification of curriculum offerings. The traditional subjects have been restored to their former strategic position in the lay mind. The newer subjects have been condemned as "frills." While the public must be considered in formulating decisions with respect to what shall be taught, curriculum revision is too technical a matter to be subjected entirely to the hazards of public opinion. In curriculum construction and revision, the contributions of all types of subject matter to educational objectives must be evaluated scientifically and philosophically. Some of the newer subjects are as likely as the old to contribute to the attainment of objectives recognized by the public as desirable. The determination of the extent to which subject matter of all types functions in the attainment of specified objectives is a matter of research. The tasks of formulating objectives and continuously modifying them, and of providing subject matter which will function most effectively in the attainment of the objectives are activities which require the efforts of research workers thoroughly trained in the techniques of research and in the philosophy of education.

Research has demonstrated the range of individual differences in the traits of public-school pupils. Effective education and true economy require adequate provision for these differences. A number of plans and procedures for dealing with them have been proposed. Some of these have been evaluated experimentally, but further and more dependable experimentation is necessary. It is neither economical nor educationally progressive to utilize an elaborate procedure of homogeneous grouping, or of individual instruction, unless the procedure is decidedly more effective than the traditional plan of school organization in engendering all of the abilities recognized as desirable educational objectives. While it is probable that some of the newer procedures are significantly more effective than the traditional ones, details of the procedures have not been perfected. The devising of these details and the determination of their effectiveness require research. In inaugurating a procedure for providing for individual differences in a given school system, adaptation is required to meet the needs of the system and to conform with the facilities available. After the procedure has been put into operation, continuous evaluation of its effectiveness is necessary. Such evaluation, conducted by the research department, should aid in securing increased effectiveness of the procedure by locating weaknesses and by suggesting desirable modification of details. An auxiliary function of the research department is the discovery of pupils who are not securing the expected benefit of the procedure. When these pupils are discovered and indicated to principals and teachers increased attention can be given to them.

Research Needed for Instructional Methods

There is urgent need for further and more dependable research on methods of instruction. Experimental research on instructional methods conducted in the past has resulted in some dependable conclusions. It was pointed out, however, that few of these conclusions may be

accepted as generalizations universally applicable to pupils of a given intellectual and educational status. Further experimentation, with the utilization of the best of contemporary techniques and conducted over longer periods of time, should result in more dependable and applicable findings. When experimentation is conducted in a city school system, certain values accrue to the system, and to education in general, which justify the expenditures involved. When the intellectual and educational status of the pupils participating in the experiment is reported, the conclusions, if dependable with respect to these pupils, are worthy of acceptance as generalizations. Individuals in other localities can apply the findings to pupils of similar status. A knowledge of which of two methods of instruction is relatively more effective, under the conditions of a given school system, enables the administrator to formulate a policy with respect to what method of instruction should be used. The experimentation may justify a decision to utilize the method of instruction which is least expensive. For example, an experiment on the lecture-demonstration method versus the individual-laboratory method in high-school science may reveal that these methods are approximately equal in effectiveness as measured in terms of achievement. The lower cost and a demonstrated equal efficiency of the lecture-demonstration method may justify its adoption.³ Experimentation may prevent the hasty adoption of new and expensive methods of instruction. There is considerable pressure being exerted for methods of instruction involving visual materials. It may be that the outcomes of such methods of instruction justify their cost, but experimentation is needed to show that these methods are significantly better than the traditional ones.

Experimentation conducted in city school systems has valuable by-products. It is an effective supervisory device. Administrators secure information with respect to the skill of teachers and with respect to their ability to cooperate with administrative officers and fellow teachers. Experimentation is interesting to teachers since it breaks the monotony of their work. It stimulates them to greater zeal in instruction and engenders in them desires to improve instruction. Furthermore, experimentation results in the accumulation of test data which are useful in diagnosis and in guidance.

Instructional Materials Deserve Study

Numerous problems relating to instructional materials are in need of research. Some of this research can be conducted by staff members of bureaus in universities and teacher-training institutions and by research workers employed by publishing companies. Much of it will need to be conducted, however, by research workers in public-school systems. The selection and evaluation of instructional materials can most effectively be accomplished by individuals in close contact with the use of materials in the instruction of pupils. The effectiveness of most materials of instruction is in part a function of their coordination with the other materials used. Their effectiveness is also dependent on other educative factors including pupil traits, instructional methods, and the skill of the teacher in using a given material with a given method of instruction. The practical question is not one relating to the general effectiveness of the material, but one of determining whether or not the material will prove effective in the unique situation of a given school system. Frequently, published materials need supplement-

³Further research is needed on the problem of the relative effectiveness of these two methods of instruction. The laboratory method may engender intangible outcomes including interests, ideals, and attitudes which justify its greater cost. It is also desirable that some pupils acquire laboratory skills.

See Stuit, Dewey B., and Engelhart, Max D., "A Critical Summary of the Research on the Lecture-Demonstration Versus the Individual-Laboratory Method of Teaching High School Chemistry," *Science Education*, 16:380-91, October, 1932.

tation to provide subject matter adapted to local needs and to fill gaps for which there are no published materials available. The work required in the preparation of these materials and in the evaluation of published materials may justifiably be recognized as worth-while functions of the city research bureau. The solution of the practical problems involved requires the utilization of sound techniques.

What has been said about instructional materials also applies to educational tests. Solution of the fundamental problems of measurement and the construction of highly valid and reliable standard tests requires the use of elaborate techniques and the expenditure of much time and effort. These activities are probably more appropriately left to research workers in universities and publishing companies. It should be noted, however, that research relating to tests and measurements needs to be conducted in city school systems. Published tests require careful evaluation by individuals trained in measurements if the best test for a given situation is to be selected. Furthermore, there may be no published tests available which are suitable for the measurement of outcomes engendered by a curriculum which is unique to a given system. Many activities in connection with measurements are justifiable auxiliary functions of city research bureaus. The staff members, trained in measurements, are useful in administering tests, or directing their administration. Competent supervision is needed in scoring tests and in the handling and interpretation of test scores. Furthermore, the city research worker can secure more effective measurement of the achievements of public-school pupils by training teachers in the construction and use of informal tests. They can see that teachers make efforts to measure a variety of outcomes.

Finance Studies Urgent

Present economic conditions necessitate research on the problems of public-school finance. There is urgent need for the discovery of additional sources of revenue. The discovery of new sources of public-school revenue raises problems with respect to legal means of securing money from such sources. There is an immediate need for research on educational costs in terms of the values of the services obtained as a result of expenditures for them. Such research should contribute to the attainment of economy without the curtailment of desirable services. Another worth-while outcome of such research is that it will provide the information needed for effective school publicity with respect to the educational program. The return of more prosperous times will probably bring a trend toward higher salaries of teachers and administrators. Research will be needed in the formulation of salary schedules adapted to improving economic conditions and concomitant increased costs of living. There is a constant necessity for research respecting budgetary procedures, the types of bonds which should be issued to finance building operations, when and how these bonds should be sold, the limits of bonded indebtedness a school system may safely incur, and what precautions should be taken so that these limits will not be exceeded.

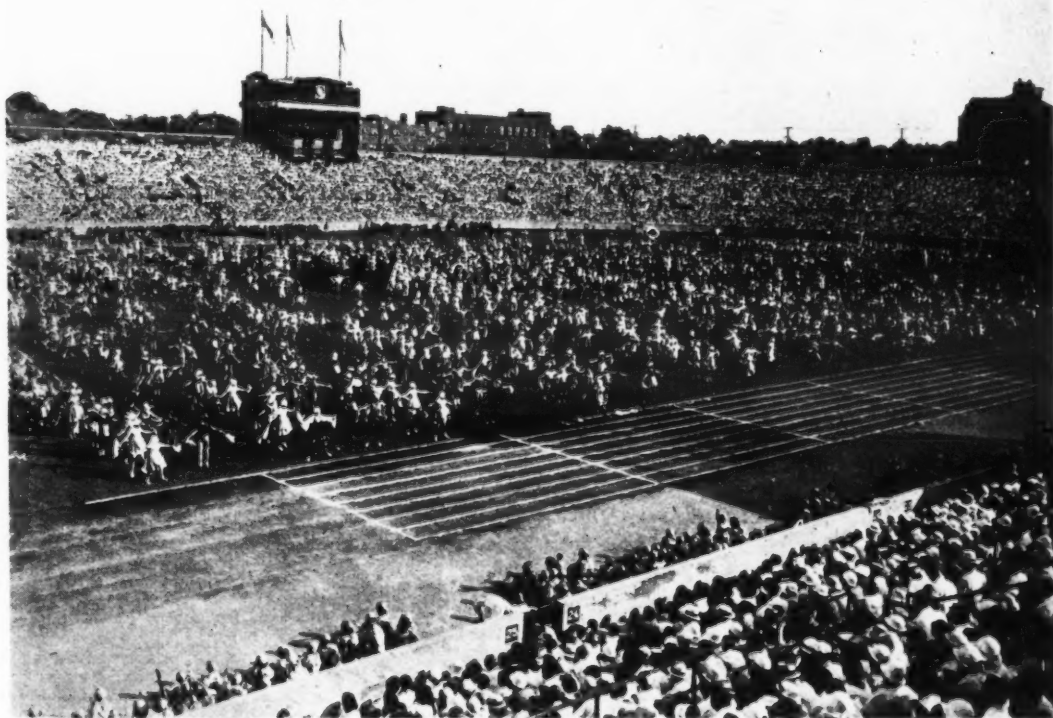
Research is needed on problems in the field of teacher training. We need to know more about the selection of individuals for training as teachers. Our knowledge of what should constitute the curricula in teacher-training institutions is meager. Little is known concerning the most effective distribution between academic and professional courses. The subject matter of many academic courses is probably unsatisfactory as preparation for teaching these courses on the high-school level. Research is needed to discover what types of academic subject matter are most effective for this purpose. A number of problems are unsolved with

respect to practice teaching: What are the most effective methods of administering practice teaching? How many classes should a practice teacher teach daily? When should practice teaching begin in teacher training and how long should it continue? What is the effect of practice teaching on the achievements of the pupils taught?

Higher education presents numerous problems in need of solution. Expenditures for research in higher education are justified in the improvement of educational services of these institutions and in the attainment of more justifiable economies. Furthermore, the extension of knowledge is recognized as an essential function of universities. It has been accepted that expenditures for research in universities do not require for their sanction, immediate returns measurable in terms of money. Hence, resumption of expenditures for research conducted in higher institutions of learning in the pure science of education can be advocated. In the further development of this science, a number of fundamental educational problems must be solved, or progress made toward their solution. Some of these problems relate to the nature and measurement of human abilities, the relative contributions of different educative factors and the optimal conditions for their operation in engendering various abilities, and the basic questions of educational objectives.

The development of sound educational and vocational guidance is dependent on progress toward the solution of the fundamental problems relating to the nature and measurement of human abilities. The dependable solution of practical problems relating to methods and materials of instruction is contingent on progress in the solution of the fundamental problems relating to educative factors. The construction and revision of curricula, the modification of methods of instruction, and changes in the organization and administration of our schools will not be adequately accomplished until we are more certain of the goals of education.

In conclusion, it may be repeated that educational research has reached maturity. More adequate techniques have been developed and research workers have acquired more scientific attitudes. It is possible to conduct research with greater certainty of obtaining dependable conclusions. The desirability of progress in education accompanied by true economy necessitates critical and systematic thinking with respect to educational programs and policies. The services of trained educational research workers are needed in meeting this demand. It seems justifiable to conclude, therefore, that research in education is indispensable and worthy of promotion in the continued progress of education.



St. Louis Schools Hold Sixth Annual Play Festival

That the people of St. Louis appreciate the summer play program, conducted by the St. Louis public schools, was evidenced at the sixth annual festival and pageant, held August 25 and 26, in the public-school stadium. The affair, which was witnessed by a crowd of 35,000 persons, consisted of games and athletic events, a handicraft display in which each of the 46 play centers exhibited articles made by the children during the summer, and a pageant, Robin Hood, in which 6,500 children in costume took part.

The festival, which is an annual event, brings to a climax a summer season of public-school playground work. The 46 school play centers maintained by the board of education are open each summer for eleven weeks, with an average daily attendance of 40,000 children. The various activities in which the children engage during the summer form the background for the annual festival and pageant, which is rapidly achieving prominence as one of the spectacular events of its kind.

This year, in order to accommodate a greater number of people, the stadium was opened on Fri-

day afternoon, so that some 10,000 persons were able to view the handicraft display. The handicraft booths were opened on Saturday morning, and in the afternoon the festival proper took place. At this time a total of nine city championship games were played, with contests in baseball and horseshoes for senior boys, baseball for intermediate boys, horseshoes and dodge ball for junior boys, volley ball and net handball for senior girls, and end ball and captain ball for junior girls. The games were called off simultaneously on the huge playing field of the stadium, while a track and field meet was being conducted on the running track.

Following the games and athletic events and the awarding of prizes to the winners of the events, the pageant of Robin Hood was presented. A group of 6,500 children in costume portrayed in pantomime the story of Robin Hood and his men in the forest. The riot of color and the throng of the participants of school on September 5. Playground courses for the training of instructors for the 1934 season will be held during the winter. The school playgrounds are under the direction of Mr. Rodowe H. Abeken.

Trends in the Purchasing Power of Teachers' Salaries

Russell L. C. Butsch, Professor of Education, Marquette University, Milwaukee, Wisconsin

The salaries of teachers, like the incomes of other groups of workers, are of significance only when they are considered in terms of what they will purchase. So long as the general level of commodity prices remains approximately the same from year to year, an increase or a decrease in salary can be interpreted as an increase or a decrease in real purchasing power. But when the general price level fluctuates over a wide range or shows a consistent trend either upward or downward, such direct translation of money income into buying power is no longer possible. For that reason it has become the custom in recent years to evaluate salaries or wages in relation to the cost of living, or the purchasing power of the dollar.

Index Numbers of the Cost of Living

The two most widely used measures of the cost of living are the series of index numbers prepared at frequent intervals by the Bureau of Labor Statistics of the United States Department of Labor, and by the National Industrial Conference Board. Each is based primarily upon a study of the budgets of a large sampling of workingmen's families, which determined the relative expenditures for certain articles and certain classes of commodities. The index for a particular date is obtained by finding the average prices of these commodities and giving to each the weight that it should have in proportion to its importance in the budget. These prices are then referred to a base year for which the value is arbitrarily set at 100.0. The index numbers of the Labor Bureau are computed from 1913 as a base. Those of the National Industrial Conference Board were originally calculated with 1914 as a base; this base year has recently been changed to 1923. The cost-of-living-index numbers as furnished by these two agencies are presented in Table I. Those for the second named have been recalculated with 1914 as the base year, in order to make them more nearly comparable to the series prepared by the Bureau. In each case the average annual index is given.

A Cost-of-Living Index for Teachers

During the school year 1931-32 Eells¹ conducted a study of the salaries of teachers and the cost of living in Fresno, California. During

¹Walter Crosby Eells, *Salary and Cost Study of Fresno Schools*, Fresno City Council of Education, 1932.

The increase in all prices and in certain salaries which has succeeded the NRA adjustment and the subsequent increase in employment has made the problem of adjusting teachers' salaries one of immediate importance to all boards of education. The present paper indicates recent trends and suggests adjustments which are likely to be necessary in the near future.—Editor.

the course of this study he had occasion to question the validity of the use of the index number as furnished by the Bureau of Labor Statistics, in its application to teachers' salaries. By analyzing the number into its component parts, and by using the cost of living as reported by the teachers in that city, he constructed an index number for teachers. In later articles and reports he elaborated this idea, carried the series through 1932, and applied it to other cities.² With some slight variations, his method of constructing the index number was used in an issue of the "Educational Research Service" of the Department of Superintendence and Research Division of the National Education Association.³ Eells's cost-of-living index for teachers is shown in the fourth column of Table I. It is based on data for December of each year, rather than on the yearly average.

It is obvious that the differences between the three series of index numbers described will depend in large measure upon the weightings given to the items in the budget. The National Industrial Conference Board makes use of the index of food, developed by the Bureau of Labor Statistics. Its other separate indexes for the various classifications included are arrived at independently. Eells used the index numbers for the separate categories exactly as prepared by the Bureau. The first two series, with independently derived data, are seen to be very similar. That prepared by Eells is seen to be materially different. The cause for this difference is recognized at once when the weightings of the several classifications are compared. In the case of the three series, the weights assigned are as follows:

²"It Would be Unfair to Reduce Teachers' Salaries Now," *The Nation's Schools*, X: 17-22 (Sept., 1932).
³*Teachers' Salaries and the Cost of Living*. Stanford University Press, 1933.
⁴Circular No. 1, 1933.

Bureau of Labor Statistics	
Food	38.4
Clothing	16.7
Rent	13.1
Fuel and light	5.2
House furnishings	5.1
Miscellaneous	21.5
National Industrial Conference Board	
Food	33.0
Housing	20.0
Clothing	12.0
Fuel and light	5.0
Sundries	30.0
Eells's Index for Teachers	
Food	16.2
Clothing	11.9
Housing	16.4
Miscellaneous	55.5

An examination of the index numbers for these classes of items as prepared by the Bureau indicates that the index for the item "Miscellaneous" did not fall nearly as rapidly after 1928 as did those for the other items. Thus in December, 1932, it still stood at 199.3, while the index for "Food" had dropped to 98.7, and the total index to 132.1. Since Eells gives this item a weight of 55.5, as compared with 21.5 in the Bureau index, it is clear that the size of his index number in the later years of the series is mainly to be accounted for by this one classification.

TABLE I. Four Indexes of the Cost of Living in the United States, 1913-1932

Year	Bureau of Labor Statistics 1913=100	National Industrial Conference Board 1914=100	Teachers' Index—Eells 1913=100	Teachers' Index—Present Study 1913=100
1913	100.0	100.0	100.0
1914	103.0	100.0	102.6	100.9
1915	105.1	100.3	105.7	102.5
1916	118.3	107.7	114.7	113.5
1917	142.4	128.1	138.8	135.9
1918	174.4	155.5	166.7	165.7
1919	188.3	172.6	191.6	190.2
1920	208.3	192.6	202.2	199.0
1921	177.3	165.6	188.5	174.5
1922	167.3	156.9	183.3	168.2
1923	171.0	161.3	185.5	170.0
1924	170.7	163.7	185.1	169.3
1925	175.7	167.4	188.3	173.1
1926	175.2	167.4	187.4	171.4
1927	173.4	163.8	185.9	167.9
1928	170.6	161.9	186.3	167.5
1929	170.8	161.3	186.4	167.2
1930	163.6	155.2	181.4	159.7
1931	148.1	139.8	172.5	147.5
1932	134.0	125.3	162.2	136.4

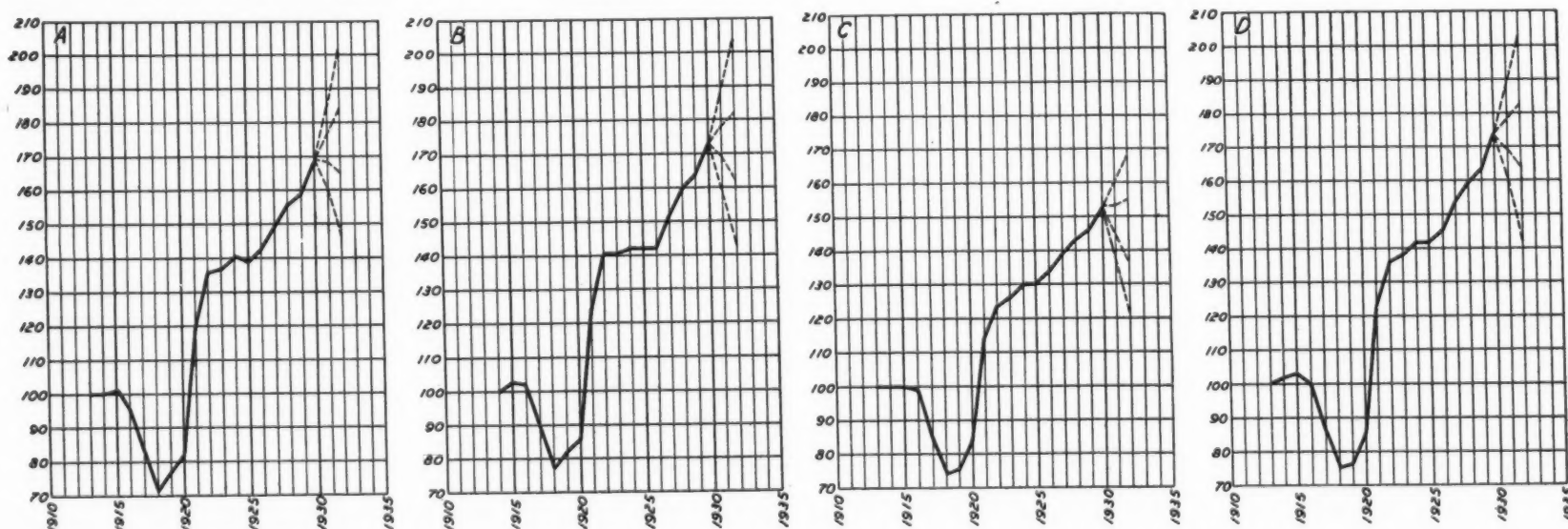


FIGURE 1
THE PURCHASING POWER OF AVERAGE ANNUAL SALARIES OF TEACHERS IN THE UNITED STATES SINCE 1913, AS DETERMINED BY FOUR INDEXES OF THE COST OF LIVING
A—Index of Bureau of Labor Statistics, Base 1913. B—Index of National Industrial Conference Board, 1914. C—Cost-of-living Index for Teachers as Prepared by Eells, Base 1913. D—Cost-of-living Index for Teachers as Determined by the Present Study, Base 1913.
(The four broken-line extensions on each curve represent the following hypothetical situations: average salary the same in 1931 and 1932 as in 1930; a reduction of 5 per cent in 1931 and 10 per cent in 1932 as compared with 1930; a reduction of 10 per cent in 1931 and 20 per cent in 1932; a reduction of 15 per cent in 1931 and 30 per cent in 1932.)

The "Miscellaneous" Item of the Index Number

The weight given by Eells to this item "Miscellaneous" in the calculation of his index number makes it necessary to examine it more closely. Like other separate indexes furnished by the Bureau of Labor Statistics, the index for this class is determined by obtaining prices of articles of certain specified kinds. Eells made up his total of 55.5 by including in this category every item which did not fall in the other classifications. There are listed below the articles priced by the Bureau in constructing the index, and those included in this classification by Eells. The latter are followed by the percentage of the total budget which they contributed.

Bureau of Labor Statistics

Carfare
Motion pictures
Newspapers
Physicians' fees
Dentists' fees
Medicine
Hospital fees
Spectacles
Barber service
Toilet articles.
Telephone
Tobacco

Teachers' Budget in Fresno

Health	4.4
Dependents	4.3
Gifts	2.7
Cultural	1.3
Professional	1.8
Charity, church, etc.	3.7
Automobile	7.8
Recreation and travel	4.9
Taxes	3.2
Savings, insurance	15.2
Interest	1.1
Incidentals	2.4
Miscellaneous	2.7

It is apparent that while a few items on the second list may be found in the first, there are many which differ materially. Eells dismisses them with the following statement:

"There are many other items in the professional budget, too, which are not included in the Bureau's miscellaneous group, upon which there have been few if any reductions in cost—tuitions at summer schools, association memberships, books and magazines, automobile maintenance, gasoline, taxes, life insurance, payments on house, interest, music lessons, concerts, lectures, and church and charity."⁴

By "reductions in cost," he means, of course, reductions since 1929, or since the beginning of the depression period. While one might accept the statement that certain of these items have shown no material reduction during that time, one might also question the implicit assumption that they have doubled since 1913. Since the index for "Miscellaneous" is still nearly 200.0, with 1913 as a base, such an assumption has been tacitly accepted. Among those which might be questioned are such items as tuitions at summer schools, association memberships, books and magazines, etc.

The following items in Eells's list might, with some reservations, be included as of the same general character as those in the Bureau's index of "Miscellaneous": health, 4.4; cultural, 1.3; incidentals, 2.4; miscellaneous, 2.7. Others which may probably be included without doing material violence to the intent of the index are: professional, 1.8; charity, church, etc., 3.7; recreation and travel, 4.9; taxes, 3.2; interest, 1.1. These make up a total weighting of 28.2. For the remaining items some rather serious objections might be raised.

The item "Dependents," with a weight of 4.3, would seem more logically to belong under other headings rather than under "Miscellaneous." Certainly one is more likely to spend money for food, clothing, and housing of dependents rather than for carfare, motion

pictures, and tobacco. While it is true that the number of dependents and the degree of their dependency may tend to increase during a depression, there is still little justification for assuming that the expenditure for this item will vary in proportion to the index for "Miscellaneous." Such increased responsibility will be an individual matter and can hardly be taken into consideration in the construction of such an average measure as an index. The safest assumption would seem to be that in general expenditures of this type will vary with the general cost of living. On this assumption the item should be eliminated, and the weights of the remaining categories readjusted. This has the effect of distributing the expenditure proportionately among the other classes in the budget.

In regard to the item "Savings, insurance, etc.," Eells says: "In such a fundamentally important matter as life insurance it has even been necessary to increase substantially the total amount carried in order to afford anything approximating the same relative protection, owing to the decreased purchasing power of each dollar's worth of life insurance purchased."⁵

If he is still referring to changes since the beginning of the depression period, as in the preceding quotation—which occurs in the same paragraph—this statement is difficult to accept. Any cost-of-living index so far prepared—including the one which Eells himself presents—indicates a decrease in the cost of living, carrying with it an increase in the purchasing power of the dollar—whether that dollar comes from life insurance or from some other source. The most logical interpretation of the item "Savings" would seem to be to consider that it varies with the income. And the fundamental assumption of the entire discussion of this problem is that income should have some relationship to the cost of living. If the income is greater, in proportion to the cost of living, that should mean, among other things, an increased ability to save. But to say that the requirement of saving will vary with the items in the Bureau's "Miscellaneous" group, rather than with some other classification, is certainly to make an unwarranted assumption. This line of reasoning points to the validity of omitting the item of "Savings" from any determination of the index, which would mean assuming that it varies with the total cost of living—at least insofar as that cost of living is used to determine salaries.

The one remaining item in Eells's "Miscellaneous" list is one toward which suspicion should be directed immediately—that of "Automobile Maintenance" with a weighting of 7.8. Rather than to assume that this item varies with the Bureau's "Miscellaneous" list, it would seem to be better to refer to other Bureau indexes which give definite information. One such index is that of the wholesale price of automobiles. While this is not as valid as a retail index would be, it is likely that it is very close, since the retail price in this field responds at once to a change in wholesale quotations. With 1926 as the base, the index in 1913 is found to be 147.5; the high point was reached in 1920 with 160.7; and the index in 1932 was 98.6. Two other index numbers of wholesale prices may be found in this field. That for petroleum products was 73.3 in 1913; 183.5 in 1920; 100.0 in 1926; and 45.4 in 1932. The figures for the retail price of gasoline in fifty cities are available for only part of the period, but it shows a somewhat similar trend. In 1920, for example, it was .2974; in 1926, .2009; and in 1932 it had fallen to .1325. The index of wholesale prices of automobile tires was 207.2 in 1913; 232.5 in 1920; 100.0 in 1926; and 41.1 in 1932.

With the figures of these three series of index numbers it is possible to construct a rough estimate of the cost of automobile maintenance from 1913 to 1932. This was done by giving automobile prices a weight of four, petroleum products a weight of four, and tires a weight of one. The index numbers, after the base was changed to 1913, were as follows:

1913	100.0	1923	80.2
1914	85.7	1924	78.5
1915	76.4	1925	82.5
1916	87.9	1926	82.5
1917	99.6	1927	71.1
1918	115.1	1928	71.5
1919	118.3	1929	71.9
1920	147.3	1930	65.7
1921	107.2	1931	54.8
1922	91.0	1932	55.7

While this must be admitted to be merely an approximation, it is still better than including this item under the classification of "Miscellaneous."

It is now possible to redistribute the weights to be used, based upon the data for Fresno teachers and the discussion of the preceding paragraphs, as follows:

	Original Weights	Redistributed Weights
Food	16.2	20.1
Clothing	11.9	14.8
Housing	16.4	20.4
Miscellaneous (55.5)		
Miscellaneous	28.2	35.0
Automobile	7.8	9.7
Savings	15.2	(omitted)
Dependents	4.3	(omitted)
	100.0	100.0

Teachers' Budgets in Other Cities

In order to construct an index of the cost of living for teachers in the country as a whole, it would be desirable to have available a budgetary study covering a wide sampling. Such a study has been undertaken by the National Education Association, but the results have not as yet been published. In the absence of such data an approximation may be obtained by making use of such studies of teachers' budgets as are available. Such investigations for four cities other than Fresno are used here for that purpose.⁶ An examination of the reports does not indicate in any case the composition of the "Miscellaneous" item. However, in some cases it is evident that "Savings" have been included. The percentages attributed to each of the four major items have been recalculated as was done for the data from Fresno. Where it was obvious that the item "Savings" was included under "Miscellaneous" the weight of the latter was reduced by 15.0, unless the amount of the former was also given separately. In each case it was arbitrarily assumed that the item "Automobile Expense" would have the same weighting as was found for Fresno. Where data were given for more than one class of teachers, a simple unweighted average was used. The resulting weightings are given in Table II. The average for all is the simple, unweighted mean.

These data furnish a rough measure of the weights which might be given to the various items of the budget in determining an approximate index of the cost of living for teachers. No claim is made for their accuracy or validity, other than that they probably give a fairer picture for the country as a whole than would the use of Eells's figures. The cost-of-living index in the last column of Table I was obtained by the use of these weightings and

⁴T. C. Holy, *Cleveland Teachers' Salaries*, Ohio State University, 1932.

⁵F. W. Hart and L. H. Peterson, *Teachers' Salaries in San Francisco*, San Francisco Consolidated Salary Study Committee, San Francisco, 1929.

⁶Royal Meeker, *A Study of Costs and Standards of Living of Minneapolis Teachers in Relation to Their Salaries*, Central Committee of Teachers' Associations, Minneapolis, 1926.

⁷Report of the Committee on Salaries of the Cincinnati Public Schools, Board of Education, Cincinnati, 1926.

⁴Teachers' Salaries and the Cost of Living, p. 13.

⁵Ibid., p. 13.

the index numbers for the separate items as furnished by the Bureau of Labor Statistics for December of each year. The index for the item

TABLE II. Adjusted Weightings of Five Items in Teachers' Budgets, Based on Cost-of-Living Studies in Five Cities¹

City	Food	Cloth- ing	Hous- ing	Miscel- laneous	Auto- mobile ²
Fresno	20.1	14.8	20.4	35.0 ³	9.7
San Francisco..	22.0	15.9	27.1	25.3	9.7
Cleveland	19.2	11.6	17.4	42.1	9.7
Minneapolis ..	24.1	22.0	20.6	23.6	9.7
Cincinnati	25.3	11.2	26.7	27.1	9.7
Average	22.14	15.10	22.44	30.62	9.7

¹Where "Savings" were included under "Miscellaneous" in the original tabulation, that item has been reduced, and all items recalculated to bring the total up to 100.0. In the case of Fresno, 15.2 was subtracted from "Miscellaneous"; in the cases of Cleveland, Minneapolis, and Cincinnati, the reduction was 15.0, 15.0, and 16.2.

²The cost of automobile maintenance was assumed to be the same in all cities as in Fresno. This amount was transferred from "Miscellaneous" to "Automobile," after making the readjustment.

³The "Miscellaneous" item for Fresno was also reduced by 4.3, the amount assigned to "Dependents," before making the readjustment.

"Housing" was obtained by combining proportionately the weights in the Bureau index for "Rent," "Fuel and Light," and "House Furnishings." While Eells obtained his index by combining the first two only, the Circular of the Department of Superintendence, referred to above, made use of all three items. The index of "Automobile Maintenance" given above was

TABLE III. Indexes of Purchasing Power of Average Annual Salary of Teachers in the United States, on the Basis of the Four Indexes of Cost of Living, 1913-1930

Year	Average Annual Salary	Bureau of Labor Statistics 1913=100	National Industrial Conference Board 1914=100	Teachers' Index - Eells 1913=100	Teachers' Index - Present Study 1913=100
1913	512	100	100	100	100
1914	525	100	100	100	102
1915	543	101	103	100	103
1916	576	95	102	99	100
1917	606	83	89	85	87
1918	635	71	77	74	75
1919	739	77	83	75	76
1920	871	82	86	84	85
1921	1,100	121	126	114	123
1922	1,166	136	141	124	136
1923	1,199	137	141	126	138
1924	1,227	140	142	130	142
1925	1,252	139	142	130	142
1926	1,275	142	142	133	145
1927	1,321	149	153	139	154
1928	1,364	156	160	143	159
1929	1,392	159	164	146	163
1930	1,420	169	173	153	173

TABLE IV. Index of Purchasing Power of Average Annual Salaries of Teachers in 1931 and 1932 on the Basis of the Four Indexes of Cost of Living, under Certain Hypothetical Conditions of Reductions from the 1930 Salary

Year	Per Cent of Reduction from 1930 Salary	B. L. C. 1913=100	N. I. C. B. 1914=100	Eells 1913=100	Present 1913=100
1931	0%	186.9	189.2	160.9	187.8
1932	0%	206.5	212.1	167.2	203.1
1931	5%	177.5	179.7	152.9	178.4
1932	10%	186.0	190.1	154.1	182.8
1931	10%	168.3	170.4	144.9	169.0
1932	20%	165.2	168.9	136.9	162.5
1931	15%	158.5	160.9	136.8	159.6
1932	30%	144.6	147.8	119.8	142.2
Index in 1926...		142	142	133	145
Index in 1930...		169	173	153	173

Per Cent of Reduction Necessary to Bring Purchasing Power to the 1926 Level

1931	24.0	24.9	17.3	23.7
1932	31.3	32.8	25.8	28.6

used in connection with the weight assigned to that item.

In order to determine the variations in the purchasing power of teachers' salaries in terms of the various series presented in Table I, the data of Table III were computed. The second column shows the average annual salary of teachers in the United States from 1913 to 1930. The figures are those given in the Research Bulletin of the National Education Association, Vol. V, No. 3, for the years 1913 to 1926. Those for the remaining years have been obtained from the Biennial Surveys of Education. The last four columns of Table III give the index of purchasing power of teachers' salaries determined on the basis of the index numbers shown in Table I. The year 1913 is used as the base in three instances, and 1914 in the series derived from the index of the National Industrial Conference Board. These data are presented in graphic form in Figure 1.

Purchasing Power of Teachers' Salaries Since 1930

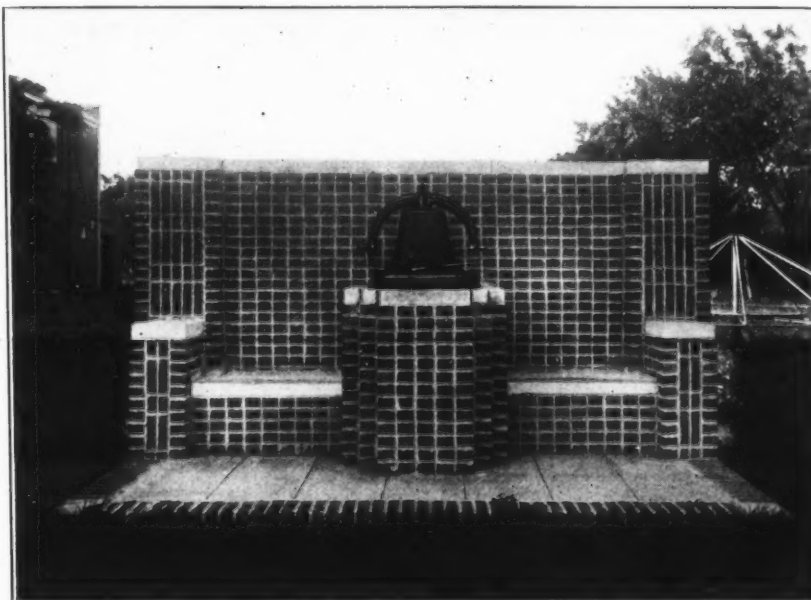
While the data on the average annual salaries of teachers, as furnished by the Biennial Surveys of Education, are not yet available for the years 1931 and 1932, some evidence of the probable trend may be found in the Research Bulletin of the National Education Association for March, 1933. Data presented in this bulletin indicate that the median salaries of teachers of various types in cities of the several population groups were from 5 to 9 per cent lower in 1932-33 than in 1930-31. Of course, decreases in salaries were much greater in many communities throughout the country, while in others they were less. Table IV presents data on the purchasing power of the average salary of teachers under certain hypothetical conditions. The first two lines of the table show what the purchasing power would have been had salaries remained at the same level in 1931 and 1932 that they were in 1930. The next two lines assume a total reduction of 10 per cent in 1932, distributed equally between the two years. The next two lines assume a total reduction of 20 per cent in 1932, distributed in the same way. The next two show the situation if the reduction had been 30 per cent in 1932, and 15 per cent in 1931. The last two lines indicate the percentage of reduction which would have been necessary, under the conditions of each cost-of-living series, to make the salary in 1931 and in 1932 equal in purchasing power to that in 1926. The data of the first eight lines of this table have been added to the curves in Figure 1 so that the purchasing power under these four hypothetical situations can be

compared with the earlier parts of the curves.

Conclusions

An examination of the curves in Figure 1 indicate very clearly that the trend of teachers' salaries would need to be interpreted in much the same way, no matter what index number of living costs is used. In each case there is seen to be a sharp loss in purchasing power during the period of the world war. After the war this purchasing power rose very sharply, and to a level materially higher than the early part of the curve. With minor fluctuations, and with minor variations in the curve, this increase in purchasing power continued up to 1930. In every case there was a rather sharp increase in 1930 over 1929. While the curve does not rise as high if Eells's index is used, it does rise with less fluctuation. The hypothetical extensions of the curves indicate that no matter what index is used, a reduction in average salary of 10 per cent in 1932 as compared with 1930 would still result in an increased purchasing power. In every case a total reduction of 20 per cent in 1932 would have resulted in a purchasing power at least as high as that in 1927. The last two lines of Table IV show that even if the index prepared by Eells is used, the reduction in 1932 as compared with 1930 would have had to be 25.8 per cent in order to bring the purchasing power down to the 1926 level. The year 1926 is used here because of the importance attributed to the price levels of that year by certain leading economists in the discussion of inflation. In the light of the data furnished by the N.E.A. Research Bulletin mentioned above, it is unlikely that average salaries throughout the country will show a reduction in 1932 of over 25 per cent below the 1930 level.

The conclusions based on an examination of these curves should not be accepted as justifying wholesale salary reductions in 1933. There are many evidences that the downward trend of prices has been arrested. Reductions in salary when general price levels are advancing would result in serious curtailment of purchasing power. The time to reduce salaries is when the cost of living is decreasing, not when it is increasing. Nor do these curves present any evidence whatever to show what teachers' salaries should be. They merely show what the purchasing power was during each year of this period, and in terms of the various indexes of living costs. What teachers' salaries should be, either actually or in terms of purchasing power, depends upon many factors. What they have been in the past is probably not even one of those factors.



HONORING THE OLD SCHOOL BELL

The Alumni Association of the Dorchester, Nebraska, High School has provided a permanent place of honor for the old Dorchester High School bell. The garden seat has been placed at one end of the formal school garden and hedges have been planted on either side to separate the garden from the school playground proper.



SPACIOUS PLAYGROUNDS CHARACTERIZE THE LOS ANGELES SCHOOLS IN ALL DIVISIONS. AFTER SCHOOL HOURS THE GROUNDS ARE OPENED FOR ADULT USE.

PLAYGROUNDS for the GROWN-UPS

Valerie Watrous

Beneath the soft glow of great flood lights hundreds of young men and women of Los Angeles gather nightly throughout the year to play games. School playfields used throughout the day by children under eighteen should offer ideal conditions as recreational centers for adults after six o'clock. This is the program of community service developed by C. L. Glenn, director of physical education for the Los Angeles city schools.

That recreation of a wholesome type is as important after a day in the office or factory as it was during the twelve years spent in school classrooms has long been one of Director Glenn's pet theories. But how to meet this need? This was the problem he set out to solve.

Southern California is a land of soft, mild evenings. It is also a land of short twilight. There the dark seems to crouch in the east, awaiting the disappearance of the swiftly descending sun. Once the "lord of day" has gone, night springs out and devours the last of the waning light. There is little time for play between the closing of the office or shop and the darkness that puts a period to the game.

The Beginning of Adult Recreation

More than ten years ago this young Los Angeles school executive began urging the opening of playgrounds after school hours. His ideas were accepted reluctantly, but during the past six years he has made headway and many fields have been opened in different sections of the city. However, the short twilight, even in summer, was a problem that could only be overcome by flood lights, if he was to reach the men and women who most needed recreation.

Always the specter of expense, that stern critic of the educator, called a halt when the subject of illumination was discussed. It would cost too much to light playfields Mr. Glenn was told on more than one occasion when his favorite theme of flood lighting was being discussed.

Provision for Flood Lighting

After numerous experiments it was found that a single light of four units, set up on a

standard 40 ft. above the ground, would adequately illuminate a playfield or tennis court. Its chief recommendation was that it could be installed at moderate cost.

The structure finally adopted by the board of education was of the simplest design. Cast-iron pipe was used for the purpose, the lengths graduated in size as they rose from the base. The actual cost of installation is \$150, a small sum when one considers the value to the community.

Two years ago the first playground was lighted in this manner. Throughout the past year nine high-school tennis courts, situated in

widely separated sections of the school district, have been thrown open to the public for night play. Each one is equipped with a flood light that adequately illuminates the court for play. These lighted grounds are tendered to service clubs, to workers in mercantile houses, industrial plants, young men and women in offices, as well as clerks in the county and city buildings.

Games Without Expensive Equipment

Tennis courts are commonly used for soft baseball, which is the popular game with the Californians. Two games of 36 players each



SOCCER IS A POPULAR GAME WITH MEN ON THE FLOOD-LIGHTED SCHOOL PLAYGROUNDS



MANY FINE OLD TREES ON SCHOOL PLAYGROUNDS IN LOS ANGELES OFFER SETTINGS FOR PAGEANTS AND PLAYS

may be played during the evening, where only eight men can play if tennis is the game. Other appealing factors are that this game needs no special type of clothing, nor does it require costly equipment.

Since mixed playing is not permitted, groups of women play with members of their own sex—and the women also play soft baseball. To the man or woman unfamiliar with the popularity of baseball among elementary- and high-school girls, this preference may seem a bit startling, but any observer from the side lines readily admits that the girls not only play the game well, but have lots of fun doing it.

In a recent request from a public utility corporation for permission to use the grounds after school hours, it was discovered that more than two thirds of the applicants were girls. This corporation was asking accommodations for 200 players, five nights a week. Twelve of the teams were to be made up of women office workers, and the game specified was indoor, or soft baseball.

During the school year of 1930-31, a total of 4,032 permits were issued to 350 organizations. Since then there has been steady growth. These permits were all for adults, and the figures represent organized commercial, indus-

trial, religious, and social organizations. The recreational activities sponsored by the evening high schools are separate and apart from the worker groups, and also number many thousands.

Other Forms of Recreation

In addition to the lighted playgrounds a swimming pool, built at a cost of more than \$80,000, is open at Los Angeles High School for use in the evening. The money for this pool was a student-body fund and represented twenty years of saving.

Only those schools situated near large industrial plants, or in the downtown sections of the city, have been opened for evening use. The expense of flood lighting and supervising these fields is only justified where a large section of the community may be accommodated.

In some of these industrial districts the neighbors make up parties in which all members of the family participate. Picnic baskets are prepared, thermos bottles and jugs filled with hot coffee, and chilled salads, and the supper eaten on the school grounds before the games begin. It is a type of neighborliness that is characteristic of the village or hamlet rather than the large city.

A Study of Over-Age Distribution in the Grades

Everett E. Robie, Principal, Cloonan School, Stamford, Connecticut

One of the major problems confronting the elementary school is that of over-age pupils. A retardation of one year may not be serious provided that the one year can be justified; but when approximately 30 per cent of the total school enrollment is found to be two, three, or in a few cases, four years over age, it becomes a matter of grave concern to the administration.

The traditional action of the elementary-school teacher is to refuse promotion to pupils who are below a set standard in arithmetic and English (and, in some instances, other major subjects) at the end of the semester. This may be justifiable in the absence of opportunity classes within a school, or where the teaching load is extremely heavy. But, if opportunity classes do exist, is it

not reasonable to assume that, even though a pupil may be below grade in the subjects named, he may be promoted to the next grade on trial? Should not promotion follow if results of standard tests signify that the pupil's mental and educational ages warrant the promotion? During the remainder of the school year, and after that, if necessary, he can receive help in opportunity classes to bring him up to grade.

The opportunity class as here suggested is simply a class conducted by a teacher assigned for this purpose, to which pupils from different grades and classes are sent during scheduled periods each day for special help in subjects in which they have failed. The period selected for the opportunity pupils should be one during which one of the less

important subjects is being taught in the home room.

The Problem

At the time the survey here described was made, the Cloonan School had an enrollment of 800 pupils. The greater percentage came from foreign parentage of the factory type. The majority were of Polish, Greek, and Italian extraction with poor home environment.

A pupil's over-age was determined by the very simple method of taking 6 years as the normal age of pupils for Grade I, 7 for Grade II, and so forth.

There were 20 pupils over age in Grade I, 39 in Grade II, 37 in Grade III, 38 in Grade IV, 55 in Grade V, and 52 in Grade VI—a total of 241 pupils.

Over-age pupils were next grouped in one room for each grade, and were given psychological and standard tests by an examiner employed for this purpose. These included the Stanford Achievement, National Intelligence (Scales A and B), and the Pintner-Cunningham Primary Mental Tests. Two forms were given to each pupil. After the correction of the tests the intelligence quotient and the mental and educational ages of each over-age pupil were fixed.

In conferences involving the teacher, examiner, principal, and an assistant superintendent, the standing of each of the 241 over-age pupils was considered. In general, the basis of promotion was reached by considering the placement-age of a pupil as the average of the chronological, mental, and educational ages. However, placement in a higher grade did not result except when the teacher's and principal's comments on the pupil's school attitudes were favorable. Trial promotion of 84 of these 241 pupils were made. Thirteen pupils were placed in an opportunity class, where a minimum course of study was provided for them. Of the 97 pupils who were eligible for promotion on the basis of objective tests given, there were 13 pupils who in the teacher's and principal's judgment should not be promoted. It was necessary to apply for one additional teacher to carry the promotion program into effect.

Economy of the Program

The economy of the program is clear. During the year 65 of the 84 pupils successfully completed the work of the next higher grade. On the basis of an average cost of 100 per pupil, \$6,500 was saved. The additional teacher may be rated as \$1,500 so that the net saving to the city was at least \$4,000. Far greater than this was the improved pupil and teacher morale, which was unanimously recognized. This was due, in part, to the elimination of overcrowding in all grades, which had been a burden.

The procedure of the transfers was simplified by presenting each teacher with a mimeographed list of pupils affected, to what room they were to be transferred, and further annotations deemed necessary. A scheduled hour on a specified school day was set aside when all transfers were effected. The mimeographed sheet concluded with a list of the teachers' rooms, and the actual number of pupils each teacher should have after the transfers.

Special promotion reports were next prepared by the principal, each teacher receiving a supply of them. These reports were due in the office on the last day of each month, thus allowing for a complete check-up of all pupils who had been transferred. Inasmuch as it was the belief of the teachers that an over-age pupil should be placed among pupils as near his own age as possible, it was decided that no pupil should be returned to his former grade until at least two monthly special promotion reports had been passed in, and not then, until the teacher and principal had agreed to demote the child. Teachers were requested to report on 84 of the 97 pupils transferred. Reports of succeeding months showed that the teachers considered 65 of the promotions warranted, 8 were not justified, 7 were desirable only because of the pupils' ages, and 2 were questionable.

The first number, alone, that of 65 pupils, indicates that the school has taken a step in the right direction and that the children responded by increased initiative and attention to study.

The experiment was made back in 1929. It is here described because the subsequent record of the children promoted has shown that the plan was fully justified. The over-age problem of the school has been solved permanently by adherence to the principles established.

The HOME ROOM in High School

L. R. Kilzer, University of Wyoming

The roll room, the record room, the session room, or the book room was of much assistance in an administrative way in the past. In this room enrollment of pupils took place, announcements were made, books were checked out and in, attendance was checked, and report cards were made out. Such assistance proves very welcome today in high schools where the amount of clerical help has been reduced or where, in the interests of economy, the positions of principal and assistant principal or the positions of superintendent and principal have been consolidated either temporarily or permanently.

That the modern home room has additional functions is indicated by the fact that it is sometimes called "the backbone of the school," "the hub of the school," "the pulse of the school," and "the barometer of the school." The home room is now regarded as a means of training pupils in democratic thinking and doing rather than merely a way of getting worth-while things done. It serves as the unit in many extracurricular activities. It promotes contests in scholarship, in attendance, in the sale of tickets for various school activities, in assembly programs, and in athletics. It is the unit from which one or more representatives are chosen to membership on the council of the school. Each home-room representative on the council is in a very real sense a two-way ambassador because he carries to and from the council many matters that should receive the careful consideration of the entire student body.

The home room should actually be a *home* room—a place that resembles rather closely a desirable home. It should be a miniature community in which even the most timid of the 30 or 40 pupils is encouraged and helped in his participation in group affairs. It should have as its head a sympathetic home-room teacher who counsels, guides, and encourages each pupil in the group, and who creates a wholesome, pleasant, and congenial atmosphere.

Each pupil belonging to the group usually has a desk and a seat which he occupies whenever he is in this particular room. He comes to his "headquarters" before classes to leave certain supplies until later in the day or to get certain supplies he needs in his next class or two. Sometimes a locker is provided in the hall near the home room so that he may leave his wraps and other articles near the center of his activities in school.

If a group of pupils is under the constant supervision of the same teacher during the entire school day, a splendid opportunity is given that teacher to become intimately acquainted with each pupil. Most high schools today are organized on the departmental basis, however, and consequently the pupil goes from teacher to teacher during the school day. Under these conditions it frequently happens that no teacher assumes the entire responsibility for the welfare of a given pupil. In order to overcome this objectionable condition, many high schools have adopted the home-room plan. A large assembly room which provides an individual desk and seat for each pupil cannot take the place of the home room with its more intimate contacts and better understandings. In small high schools the class (grade) may constitute the home-room group. Junior high schools have made greater and better use of the home room than have senior high schools, and six-year high schools have made more use of this plan in their lower than in their upper grades.

Selecting the home room. Too much intermingling of the younger, less advanced boys and girls with the older, more advanced, and

To provide for individual differences of pupils and to centralize many school activities not otherwise cared for in the curriculum, many schools have successfully introduced the home-room plan. The present paper has been prepared by a man who has given the problem intensive study for many years. The article will be of especial interest to school-board members who desire to keep up with the most recent improvements in school organization and teaching method.—Editor.

more mature boys and girls has objectionable features. Unfortunately the younger pupils tend to copy the bad things observed in the conduct of older, more advanced pupils at least as often as they tend to copy the better things thus observed. Pupils who have just entered one of the lower grades of a high school are less embarrassed when they are brought into contact with pupils of approximately their own age and grade than when brought into contact with older, more advanced pupils. It is considered good policy, therefore, to establish the home rooms for the upper grades in a different wing or on a different floor. If the building does not have well-defined wings or if it has only one floor, it is well to segregate the two divisions in rooms at opposite ends of the hallway, or otherwise to separate them as much as possible under existing conditions. The degree of segregation may be determined as follows: In a four-year high school the home rooms of the ninth and twelfth grades would be farthest apart; the home rooms of the ninth and tenth grades would be near each other; and the home rooms of the tenth and eleventh grades would be comparatively near each other. A similar plan could be used in either the three-year high school, the five-year high school, or the six-year high school.

The home room should provide amply for 30 to 40 pupils. It should be well lighted and as cheerful as possible. Since the pupil will probably spend more time in the home room than in any other room, much attention should be given to his comfort.

The home-room teacher. The success of the home room depends in a very large measure upon the sponsor's skill in guiding the pupils. He must be more than a mere "trouble-shooter." The home-room teacher is often called the "school parent" because he, more than any other person on the staff, stands in the place of the parent. He is expected to know more about each of the pupils in his group than does any other person connected with the school. He "adopts" 30 or 40 pupils and makes their personal problems his own. In schools where the pupil-teacher ratio is approximately 25 to 1 it is necessary that practically each teacher be employed, reemployed, or "culled out" on the basis of various criteria, among which is ability to conduct the work of the home room in a satisfactory manner. Sympathetic understanding of boys and girls of the adolescent age, and enthusiasm for the work are outstanding characteristics to be looked for. Home-room duty is not to be looked upon as an extra or as an imposition, but as the teacher's golden opportunity to be of greatest possible service to the young citizens under his supervision.

The home-room teacher should be appointed by the principal after most careful consideration. The attitude of this teacher toward the work to be done is bound to reflect itself in the pupils. Teachers who are interested primarily in pupils of a certain age should, other things being equal, be given charge of home-room groups of that age. When the groups are deter-

mined on the basis of sex, it is usually best to have a man in charge of boys and a woman in charge of girls.

Practice varies in regard to the length of time a certain member of the staff acts as home-room teacher for a given pupil or group. It is sometimes considered good practice to appoint the same teacher each year as home-room teacher for ninth-grade boys or for ninth-grade girls. This plan permits the teacher to become more or less a specialist in the home-room work of a certain grade or group within a grade, but it causes the pupil to have a new home-room teacher each year and the teacher to have a new group of pupils each year. Another plan "promotes" the home-room teacher each year with his group. In a six-year high school, for example, a given pupil would have the same home-room teacher over a period of six years. This plan provides for intimate contacts and rather complete understandings, but it is open to at least two serious objections. In the first place, the activities of the various classes are so different that it is very difficult for any teacher to be an efficient sponsor throughout the three, four, five, or six years incorporated in the high school in question. Guiding a senior group in its preparation for graduation is quite different from guiding a seventh-grade group or a ninth-grade group in orientation in a new school. In the second place, lack of rapport between a certain teacher and a certain pupil might tend to be accentuated by the prolonged contacts.

The home-room teacher should, whenever possible, be the subject-matter teacher of each pupil in the group during at least one regular class period daily. This plan assists the home-room teacher to have a better understanding of each pupil in his group than he would otherwise have.

Duties of the home-room teacher. Several of the duties of the home-room teacher have already been pointed out incidentally. He should be the "school parent" of each child in his group, and he should give counsel, encouragement, and assistance. Among his many other duties are the following: the checking of attendance, the investigation of cases of tardiness and absence, the issuing of admits to class, the holding of conferences with teachers who report unsatisfactory work on the part of any pupil in the group, the handling of most cases of discipline involving these pupils, the making out of report cards, and the gathering and keeping of information giving a rather complete profile of each pupil in the home-room group.

The following is a partial list of the items about which information should be gathered by the home-room teacher:

1. Chronological age
2. Physical development and health
3. Nationality
4. Family background, attitudes, and ideals
5. Intelligence quotient (I.Q.)
6. Mental age
7. Educational age
8. Achievement quotient
9. Grades in all school subjects to date
10. Likes and dislikes
11. Aptitudes and interests
12. Attitudes
13. Plans, hopes, and ambitions
14. Probable length of stay in school
15. Temperament
16. Habits
17. Social and economic status
18. Participation in extracurricular activities
19. Work and leisure-time pursuits
20. Associates
21. Special problems
22. Needs
23. Moral character

24. Initiative
25. Loyalty

Time allotment for home rooms. There is great variation in the amount of time devoted to home rooms in various high schools. At least a fifteen-minute home-room period should be definitely called for in the daily schedule of classes. This short period should probably come at the very beginning of the forenoon session in order that the home-room teacher may make the necessary announcements, may take up any matter left over from the previous day, and may start the pupils of this group happily on their day's journey. In addition to this short home-room period at the beginning of the school day, many forward-looking high schools devote a full period of from 40 to 60 minutes once each week to the home room. This meeting takes place during the activities period when one is provided, and still leaves this period available on four remaining days for such extra-curricular activities as assemblies, clubs, orchestra, band, council, etc. In some high schools a short period of five or ten minutes is provided for the home room both at the beginning of the forenoon session and at the close of the afternoon session, but at least one longer period should also be provided each week.

Determining the composition of the home-room group. An attempt is often made to reduce to some extent the heterogeneity of the home-room group, but very little agreement exists concerning the best means to be used. Simplicity, democracy, and feasibility must be kept in mind. Some plans would not work locally because they would create more groups than could be taken care of by the available personnel. In the beginning, the school should decide only tentatively on the plan to be used, and should then adapt the procedure in the light of experience locally. All members of the staff should be encouraged to offer suggestions for improving the plan in use.

Attention is directed briefly to some of the principal plans for determining the composition of the home-room group:

Plan 1. The home-room group of a certain teacher is his first-hour recitation group. This plan permits the sponsor to have intimate classroom contacts with each child in his group, but it tends to reduce the amount of time for regular classwork unless this first period is ten or fifteen minutes longer than the other periods in the school day. If this additional time is not provided, the academically minded teachers tend to slight the important work that should be done in the home room.

Plan 2. The home-room group is determined by grade classification. According to this plan only the pupils of a certain grade, e.g., the ninth grade, constitute the home-room group. Variations of this plan separate the pupils within the grade on the basis of sex, physical maturity, interests, curriculums pursued, school from which the pupils transferred, chronological age, mental age, educational age, alphabetical arrangement of surnames, or on the basis of combinations of two or more of these criteria.

Plan 3. The home room is made up of representatives from all grades. In a six-year high school this arrangement would include a few pupils from each of the six grades, but not necessarily the same number of pupils from each grade. The teacher is "promoted" with the pupils from year to year and needs only to become acquainted with the contingent of entering pupils who take the place of the pupils who have been graduated. It is claimed also that this plan facilitates orientation because of the influence of the older pupils upon the newcomers. A clear-cut disadvantage, however, lies in the fact that the upper-grade pupils are likely to dominate as far as holding offices and doing the work of the home room are concerned.

Plan 4. The home-room group is deter-



HOME ROOM IN ACTION—JUNIOR HIGH SCHOOL, CHEYENNE, WYOMING

mined by curriculum pursued. This plan tends in one way to reduce heterogeneity, but brings together pupils who differ very greatly in many other respects. The older pupils tend to dominate in the offices and work of the group.

Plan 5. The home-room group is determined by the probable length of stay in school. This plan is feasible in the case of a limited number of pupils who will probably leave school within a year, but if the group is large enough it should be sectioned further on the bases of sex, interest, etc. This plan is too crude as the basis for sectioning the great majority of pupils who will probably remain in high school for several years.

Plan 6. The home-room group is determined on the basis of geographical distribution of the pupils. In other words, pupils from a certain part of the school district or contributing area are placed in the same home room irrespective of grade classification or other criteria. In many ways this tends to bring together pupils who attended the same elementary school or junior high school.

Plan 7. The home-room group is determined on the basis of a combination of two or more of the foregoing plans. For example, an attempt may be made to divide the pupils into home-room groups on the bases of grade classification, sex, I.Q., physical maturity, school previously attended, and interests. Such a complex plan cannot be applied in small high schools where the entire enrollment in a single grade is only approximately 30 to 60 pupils.

The first meeting of the home-room group. The first meeting of the home-room group should take place on the very first day of the quarter, semester, or year. An attempt should be made to start pupils happily and correctly on their ways. At this meeting the pupils may become acquainted with each other and with their sponsor. A home-room letter bearing greetings and important announcements from the principal may well be read at this initial meeting. Fundamental understandings should be stressed at this time. Pupils should be told, for example, just when they are to report to the home room and why such an organization is provided. Traditions and rules of the school may be given consideration. Desks and seats, cloak-room space, and lockers may be selected or assigned. It is usually very unwise to have election of home-room officers and representatives to the council at the first meeting of the group because the pupils at this time do not

always know the requirements of the office or the qualifications of the pupils well enough to make intelligent selections. The pupils who make the best impression on the opening day are often found decidedly lacking in the qualities necessary for successful functioning in various offices. It is wise, therefore, to have the home-room teacher preside at the first few meetings of the group. This arrangement also facilitates progress in getting the most important things done. Committees need not be appointed immediately; in fact, it is well to hold this matter up until better understandings have been developed.

Committees in the home room. Standing committees are inclined merely to stand and to do nothing else. Sometimes they report progress, but careful investigation shows that this progress is mostly imaginary. Participation may be distributed by having short-time committees appointed for an immediate and definite purpose. All committees should be checked upon carefully by the home-room president (chairman) and the home-room teacher. If satisfactory progress is not being made, the committee should be given careful guidance and necessary assistance, but if it still fails to function properly, it should be discharged and another should be appointed in its place if the need still exists. Each child should be placed upon some committee but his duties should be made explicit. Some home rooms post conspicuously a list of committees, their composition, and duties.

Among the more or less temporary committees that have been found worth while in home rooms are the following: the scholarship committee, the attendance committee, the social committee, the publicity committee, the welfare committee, the bulletin-board committee, the traffic committee, the locker committee, the lost-articles committee, the housekeeping committee, the booster's committee, and the reception committee. Still other committees may be appointed as the need for them arises. Training in citizenship is enhanced by having a pupil work on various committees during the school year; therefore, a given pupil's membership on any one committee should usually last not over a quarter or a semester.

The home-room program. The home-room program for the entire year may well be outlined roughly before the first day of school, but it should serve merely as a guide. Details

(Concluded on Page 44)

Portrait of a High-School Teacher

Payne Templeton, Kalispell, Montana

Miss Short has gone through thirty-two summers or thereabouts. She has been at the job of high-school teaching for the past eight years, in three schools—a little one, one not so small, and the present fairly large one. Now, we may as well be frank about this: Miss Short did not intend to be teaching at thirty-two. She had other ambitions, but the laws of chance and circumstance have lead or pushed her into the position where she now finds herself.

So far as native ability is concerned, Miss Short is considerably above the average. Her college record was a good one, though she was not spectacular in any respect. She thinks quickly and with considerable thoroughness, though there is the usual tendency toward prejudiced colorings. She possesses considerable warmth of temper, has a decided tendency toward selfishness, is quite anxious to have her own way, is not naturally too good at co-operating, has the usual inclinations toward jealousy and the customary changeableness of disposition.

This is to be a simple account of how Miss Short, with her equipment and training, has met the problems of high-school teaching, how she has expressed herself in certain respects and conquered herself in others, how she has learned to think with her *cerebrum* as well as with her ductless glands. Naturally she has met with many emotional problems, personal and intimate, some of which she has solved successfully, but with these we are not concerned in this prosaic account.

Miss Short is a fictitious person, certainly. The exact young lady does not live. But any teacher who has been through the mill will recognize some of Miss Short's experiences as her own. This might as well be the study of Mr. Long, but after all, the typical high-school teacher is a member of the feminine sex and it is more interesting and appropriate to have a heroine than a hero.

She Seeks Appreciation

In common with about all of us Miss Short has had her worries over the problem of being appreciated. We are all so constituted that the ego needs an occasional lift, else we lose heart and let go. For a while Miss Short could feel no such lift. Her feelings were hurt more, much more, than anyone could know. She felt she was doing an enthusiastic and, for a young teacher, a good job. But this apparently went unnoticed by the school board, by fellow teachers, the principal, and even the students. That is, it seemed that way to her at first. She would scold to herself somewhat as follows: "If I were only the football coach or the dramatic director or even the principal, I might get somewhere and what I do might be noticed." After a year or two, however, she began to see a little deeper into the matter and to sense that there is some justice left in the world after all. It dawned on her, for instance, that the coach's popularity depends almost altogether on victories, a fickle and dangerous popularity. She saw, too, that the principal's position is sometimes uncomfortable, even precarious. She can see much more clearly that there are some compensations operating in her direction. The better students will stop a minute or come in before school to say things that are meant to be complimentary. A parent will obviously go out of his way to say, "My boy, James, says he really likes sophomore English under you." The principal, though entirely too stingy with his praise, drops hints which indicate clearly that he regards Miss Short's work the equal of any in his

School-board members frequently are puzzled to understand the viewpoints of teachers. The present portrait of an average high-school teacher will contribute very much to a better understanding between the school-board members who represent the people and the teachers who will carry on the practical instructional work in the classroom.—Editor.

school. Fellow teachers, younger and older, seem naturally to come to her as if they value her opinions.

Jealousy Bothers Her

The Old Fellow with green eyes has had a habit of sneaking up on Miss Short, especially when she was feeling sorry for herself. For instance, he would say: "Look at Mary Brown there, she gets much more attention than you. She gets her name in the town and in the school paper right along. She has a flair for getting into things. She puts on that attitude which the kids interpret as 'pep.' She even gets a few dates with the few eligible town fellows who haven't already been absorbed by the local girls. The Student Council calls her in every day or two for advice or ideas." Miss Short has fought this thing out and has reached the point where the Old Rascal doesn't color her opinions so much as before. Not that he isn't always right there, just around the corner! But she can push him aside more easily. For instance, she has learned to reason this way about Miss Brown: "She may be one out of a hundred, a personality that lasts. That is, there may really be something to her. In which case she is headed for a successful marriage or a better job. If so, Godspeed! But chances are she will fade; her popularity is composed mainly of curiosity. She will take a few hard jolts, do her share of crying in her room and settle back with the rest. Then she will start over again and gather unto herself the notice and the influence to which her ability really entitles her."

She is Ambitious for Promotion

Miss Short is considerably more ambitious than her appearance indicates. As indicated before, she intended to step from teaching into something far more interesting. But when she found that such a step was unlikely she began to picture for herself, a teaching position in a large high school with a salary of some size, perhaps with some administrative responsibility. She told herself that she would not be just a plain teacher in a small high school all of her life. But she soon began to see how precarious was such an ambition, how rickety the ladder of promotion in the educational world. She saw how strings are pulled, how the laws of luck operate, how some rise or go to larger positions who are not particularly deserving, and how others stick around who could handle a much larger responsibility. She sees men on the faculty, for instance, who could do the principal's job better than it is being done, but who will, chances are, remain in the classroom. There was a time when Miss Short was soured by these observations and the years ahead seemed colorless, but she is growing up on this score and beginning to see more deeply. Merit does count some, she knows; the laws of chance don't have the whole world to themselves.

Miss Short is growing in her ability to do her job well. She has added unique touches to her work; some of her techniques are attracting attention. She is watching closely and her

chance may come. Yet she doesn't seem to care like she did. The American idea of getting ahead to the bigger job somehow doesn't appeal so much. Maybe she is getting tired, or this new idea is just a psychological defense. Or perhaps she is thinking a little better, beginning to suspect that it is the quality of living rather than the quantity that counts, and that quality is not related much to the bigness of one's job or salary.

Her Professional Growth

At the end of the third or fourth year Miss Short promised to be just another teacher. But she caught herself up, and began picturing herself a drab schoolmarm in a narrow path, doing the same thing over and over and becoming more and more uninteresting all the time. Our heroine became determined that such a fate would not be hers, and she set about deliberately to campaign oppositely. Her teaching subjects were at that time sophomore English and European history. Economics or sociology or American history, or perhaps science, would keep a teacher alert somewhat better. But she was thoughtful enough to see that her subjects had possibilities and that these depended almost entirely on the ability and the personality of the teacher. The professors of education, the principal, the curriculum maker could go just so far; from then on it was her responsibility to make the work an achievement or a routine. Keeping the subject matter fresh was a first task. New texts, reference books, allied materials in magazines and newspapers, the reports in professional magazines or experimental studies in her fields, were all utilized. She gave some of her attention to the different ways of teaching, of putting things over to the class, of reaching individuals and varieties of ability. And she found this much more interesting than she had thought it could be. She went back to a summer session or two, suffered some poor teaching, but had one or two courses which really aided her. She saw that most teachers get little from summer courses because of their own smugness.

Miss Short became more and more interested in individuals. She saw through subject matter to her students and through their outward selves to their natures and abilities. This interest was not so much scientific as it was personal, guided by a kindly interest. She did some reading in the field of psychology and applied it carefully to her groups. But mainly she used common sense. She made friendships with her students and discovered qualities and ambitions. She had the satisfaction of helping a few stumbling youngsters over some muddy roads. And she had the sneaking suspicion that her own personality was maturing as a result of interesting herself in other lives.

She noticed that the principal placed more and more dependence on her in extracurricular and administrative matters. Not that she is by nature a flashy director of student activities, but what she assumes responsibility for she does. At the very first of her teaching career she was anxious to take on these outside things in an effort to be popular. Then came a time when she almost resented them. Now she has come to regard them as part of her work and as part of the responsibility of the school. She is keen enough to see that she is gaining something from them, not in a cheaply popular way, but in terms of an improved executive ability and of a better opportunity to meet and associate with youngsters on a natural footing.

During the past three or four years Miss Short's vision has been gradually extending until she has become aware of the whole school, the task it is attempting as an institution, the objectives toward which it is reaching. She puts her department and subjects into the scheme as a part of the whole. She is beginning to take

an interest in the problems of the mathematics, science, and vocational departments.

Real Personal Growth

In mapping out her campaign against complacency our young lady became determined not to be "cooped up" in the school world, not to be just a school teacher versed only in the shop talk and the subject matter of her teaching field. Now, Miss Short had been raised to consider that the first page of the newspaper, and the political and economic magazines, were for men only. That is, an interest in the march of events, in the surge and ferment of social, political, and economic life were supposed to lie beyond her. Her outside interests, if any, were supposed to lie in the small talk of the theater, the arts, society, and personalities. Not until she had been in teaching for three or four years did she begin to notice, study, and enjoy the social drama which is continually unfolding. Perhaps her teaching of history according to modern viewpoints led her naturally to this position. At any rate, Miss Short is now well informed, able to give and take conversationally with almost anyone. She is careful to look at the world's social problems from more than one point of view—from the sophisticated view of several literary publications as well as from the more conventional viewpoint of *The Literary Digest* or the *New Outlook*.

But she has not allowed herself to become too "heavy" intellectually. She has merely added these interests to her already existing stock. She has retained her inclinations toward the arts, light literature, the theater; and has sharpened a natural skill at light conversation concerning such matters. She is not an authority in these fields but she is much better informed and much better able to express herself than is the typical, well-educated person.

And our heroine has not allowed pages of books to get between her and the folks about her. She has had her troubles in adjustments to certain personalities. She is well aware of the mean-nesses as well as the nice-nesses of human nature, but she has learned to overlook a lot and to like most people in spite of these things.

Miss Short managed to get in a summer of foreign travel, though she is none too "flush." (Like most of her sisters in the teaching profession she has had to help at home.) Her travel meant much more than a lark. She took to England her background of English literature and to France her understanding of French history. What she experienced there fell into soil that was well prepared. She returned thrilled and flushed, and withal a more interesting person and a more capable teacher.

Her Fine Friendships

Like all of us Miss Short has had frequent need of friendship, of close association with other very human folks, both men and women, with whom she can share troubles and joys. She early found that for a teacher friendship does not always follow customary roads; it must sometimes jump over fences.

To begin with, folks in the rather small town looked at her differently. The fellows standing on the few street corners would nudge one another as she passed by: "There's the new schoolmarm." Her first impression was that she was set up in a world to herself, where she would stay unless she made some effort at escape. The expectation apparently was that she was to teach school by day and to stay in her room by night, except on Sunday when some of the good folks thought she should handle a Sunday-school class.

Miss Short stood this for a while; in fact, she had to. She made no unconventional moves—and wisely, because no community will stand for a schoolmarm who is too bold. But our

THE YEARS TO COME

The years immediately before us will demand the best of constructive thought, of earnest cooperation, and of broad vision on the part of all those who have to do with the administration and operation of schools.—L. H. Petit.

heroine began gradually and subtly to break the bars of her prison. She began by accepting the invitation of her church to fraternize. She found that she could do this without putting on a sanctimonious appearance. She attended church rather regularly and became a member of one of the organizations in the church. She found that some of the folks she met at church carried their hospitality over to week days. This was a beginning.

Miss Short avoided a mistake that young teachers often made, of getting soured on the community and putting on a flippant air in defense. She had sense enough to see that teachers are treated as transients partly because they are transients, both in fact and in attitude. She remained outwardly pleasant no matter how she felt inside. She overlooked a lot; she made herself interesting to town folks and parents. During her second year the town folks seemed to forget that Miss Short was supposed to be a different sort of human being. More and more was she taken naturally into community life.

In her first school there were only six teachers. Two of these were rather uninteresting men and three of the others were thoroughly discouraged schoolmarms. But in the next town there were twelve teachers and at least half of these were alert, interesting persons like herself. Then she began to realize that hers was an unusual chance of friendship. She saw that her opportunity for association with others of about her same training and capability, and of similar interests, was a privilege that most people in this world do not have. Her associations with other teachers have been marred by occasional bickerings, catty remarks, and petty quarrels; but our young lady has come to realize that this sort of thing is a necessary ingredient of human association and she promptly forgets most of it.

The Finishing Touches

I am afraid I have pictured our heroine as too near the perfection mark. I have drawn the

lines too clearly; of course, they should waver, but that takes time. I have glibly had her meeting and overcoming obstacles with no apparent difficulty, though such an impression was not intended. Miss Short is entirely human; that has been intimated several times. And as a human young lady she is now having and will continue to have her troubles. Who could expect anyone short of a saint—which Miss Short isn't yet—to be perfectly balanced and consistently poised at the age of thirty-two?

She gets lost sometimes, gets disgusted with herself or with life in general, cries in desperation and absolute discouragement. At such times she may act in ways altogether unworthy of her and her teaching may approach the terrible.

Her personality lacks a lot of being what the new psychologist would call "integrated." She hasn't cemented all of herself together yet; she is still several people at once at times.

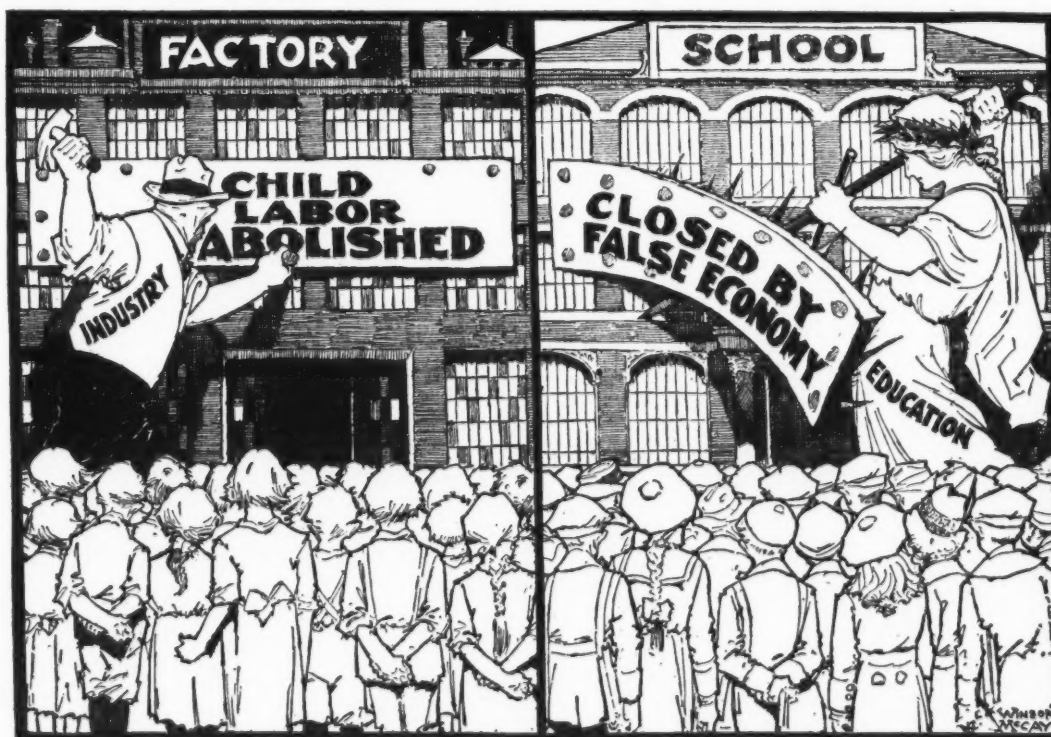
But she is getting there; getting to the point where, relatively speaking, she will be successful in the truest sense, will be effective professionally and socially, will achieve the happiness which comes from a well-thought-out way of living and from consistent, serviceable activity.

Of course, there are lots of "ifs." For instance, Miss Short may suddenly dash it all and tie her fortunes to those of some ordinary man-about-town or to some male science teacher. And in that case she may be worse off, or better. That depends. But anyway it will be Miss Short's own business.

NEW HIGH-SCHOOL STUDY

A coöperative study of standards and procedures for evaluating the work of the high schools of the country is to be made shortly, following the suggestions of representatives of the regional associations of colleges and secondary schools. In its proposals for a study of standards and procedures for evaluating secondary schools, the conference urged that (1) present standards and procedures of the various associations remain in effect until new ones are formulated and approved; (2) that new standards be created, first by testing old standards and retaining such elements as seem satisfactory, second, by evolving new standards through research, (3) that evaluating procedures be developed through careful experimentation, (4) that standards looking toward improved practices in education be developed, and (5) that all standards be adapted to the needs of the various regions.

The conference has established an executive committee to prepare a plan for the proposed study. The plan will be presented to the various regional associations for the purpose of enlisting their support, and later to some foundation interested in the promotion of education, for the purpose of securing adequate finances to conduct the necessary investigations.



FOR THE GOOD OF THE NATION!

—Winsor McCay in *Wisconsin-News*, Milwaukee.

The NEW TESTS in EDUCATION

John Dixon, Madison, Wisconsin

An important movement in the educational practice during the past ten years has been and is the development of the new testing idea. Within a single decade a new and extensive educational literature has been written; new departments devoted to tests and measurements in education have been established in leading universities and normal colleges; city systems of schools the country over have been surveyed; and the old "essay" test with its abundant accompaniment of inaccuracies, inadequacies, and excess drudgeries is being steadily displaced by the new objective test.

Scientific methods are being applied to the classification of pupils, to the discovery of special talents or tendencies in the pupils, to the measurement of the achievement of the pupils in the various school subjects, and to the problem of dealing effectively with the wide array of individual differences.

These have been revolutionary years in the history of the schools. The teaching world is talking a new language. In the larger schools trained teachers are now employed to give their time to the testing, classifying, and reclassifying of pupils so that these may be placed where they will receive the greatest benefits, and so that the schools may be administered with the least waste.

But this movement, with its potentialities for practical service, is still at its beginnings. Many know little of its meaning or value. It is based, however, on sound principles, and is so allied with the spirit of the times, that the movement must soon find universal acceptance.

The Beginnings of the New Tests

Modern testing procedure had its American beginnings before the world war. During the war, tests were devised for measuring the mental abilities of nearly two million army recruits. This testing technique is now employed extensively by the U. S. Civil Service Commission, the College Entrance Examination Board, the Board of Examiners for Teachers of New York City, in many states for the state teachers' examinations, and by city systems of schools, and individual teachers throughout the country.

The old written examination, introduced in Boston about 1845 and advocated by Horace Mann, had many points of excellence, but it also developed deficiencies and failed to make the changes needed to keep it in harmony with the demands of the advancing times. One serious defect was that the marks given under it assumed a sort of infallibility. Pupils were *failed* with righteous positiveness on a 69, and *passed* with equal certainty of the justice of the rule on a 70.

There came a time, however, when two educators decided to investigate this assumed infallibility of examination markings. So, Professors Starch and Elliott, of the University of Wisconsin, had photographic copies made of a high-school paper in English, one in history, and one in geometry. They then sent these papers to be marked by teachers of the high schools of the North Central Association. The paper in English was marked by 142 teachers of English, the history paper by 70 teachers of history and the paper in geometry by 115 teachers of geometry. The marks on the English paper ranged from 60 to 95; the marks on the history paper from 40 to 90, and the marks on the geometry paper from 28 to 93. It is interesting to note that in geometry where one would expect the greatest agreement, 20 marks were below 60 and 20 above 80, and that 68

teachers *failed* the paper, and 47 passed it. This was sixteen years ago. Since then, scores of such investigations have been made with practically identical results.

In this connection, Professor Wood, of Columbia University, relates a humorous incident which has been widely quoted. A set of history papers was to be graded in turn by each of five or six college professors. One of this group of experts decided to write out—with the book before him, of course—a set of model answers to the ten questions. This he did, but in some way his set of answers became mixed with the other history papers and was marked along with those papers. And in all innocence his brother experts gave his paper grades ranging from 40 to 90.

In Ohio, an arithmetic paper was graded by 55 examiners in the offices of as many county superintendents of schools, and the resulting grades on this paper ranged from 60 to 99 per cent.

Essay Tests Obsolete

Professor Torgerson, of the department of tests and measurements of the University of Wisconsin, has placed in the hands of many classes of experienced teachers an arithmetic paper of the seventh-grade level. Their marks in practically every instance ranged all the way from 40 to 90. It is not to be wondered at that Professor Torgerson concludes that, "*In its present form the essay or traditional type of examination is obsolete and should be discarded.*"

There are many reasons why this conclusion is correct. Many extraneous considerations entered into the grading of a paper: the temperament of the teacher, the teacher's mood at the time, the legibility of the writing, the neatness of the work, the length of the paper, the spelling, the quality of the composition, and the teacher's judgment of the attitude and deserts of the pupil. Standards differed: In the instance of the solution of a problem in arithmetic or algebra, one teacher would credit the use of the correct method as well as the correct answer, while another would give credit only for the correct answer. Often the questions given in the examination were quite different from the questions emphasized in the classwork. Also, the brief list of questions, usually ten in number, could not give an adequate sampling of the total subject matter. And then, there was still another very serious defect in the old examination system. These examination papers had to be marked by the teacher without help, and they were usually long, so that one set of examination papers usually required from two to three hours for correcting. When a teacher gave examinations to five or six or more classes the amount of sheer drudgery involved was intolerable, amounting to from ten to fifteen or more hours to be given to the task outside of the regular hours of teaching. Under the infliction of such loads conscientious teachers broke down entirely, or came into their classrooms weary and unhappy, and did spiritless and perfunctory teaching. The old examination was a slave driver. Nor was this all. The return of the grades was delayed for so long that pupils lost interest in them. And, coming to realize what a grind it meant, the teacher would give just as few examinations as possible, so depriving the pupils of the stimulus of the test.

The Drudgery of Old-Time Tests

Moreover the almost universal reaction of the pupils to these old-type examinations was one of fear and distaste. They considered them to be unfair. The classic line of Dante, "All

hope abandon ye who enter here," expressed their feelings quite exactly. They felt that no matter how thoroughly they might prepare, they were quite likely to miss the particular slant or demand of the teacher. So, the indifferent ones made but slight preparation, and the conscientious ones worried excessively. As all know, some cheating and considerable bluffing entered into the writing of these examinations, and the nature of the examination was such as to make this easily possible. This type of examination offered little or no variety, and the monotony of the tests all constructed after the same pattern, made drudgery of them for the pupils.

The realization of these many defects led some to advocate doing away with examinations entirely. But, the weight of opinion is against this. Albert H. Lang, in his book on *Modern Methods in Written Examinations*, quotes President Lowell, of Harvard, on the importance of examinations, as follows: "More than the scholars and writers is the value to men of affairs of recalling rapidly the knowledge that they need . . . upon no part of the educational process can time and thought be better spent . . . the conclusion . . . is that *examinations properly used are a vital part of the educational process, but that the art of using them to produce the best results is highly complex and difficult.*" The new tests in education are the outcome of a widespread effort to reduce measurement of school capabilities, activities, and products to a scientific basis.

The Three Types of New Tests

Tests and examinations may be grouped into three classes—the old type of compositional or "essay" test which we have just discussed, the new standard tests, and the informal objective test. The new standardized tests are tests worked out by experts, and are usually in sheet or pamphlet form. They have been worked out for all of the elementary-school subjects and for many of the high-school subjects. They are published by various companies, and are sold just as are textbooks. The most important function of standard tests of every kind is that of giving a dependable measure of the individual pupil in order that he may be placed in the grade and group where he belongs.

By giving tests to many thousands of pupils the average accomplishment of pupils in any subject in a given year of school has been established and reported as a norm of accomplishment. By means of these norms the accomplishment of any grade in any subject in any system of schools may be compared with the accomplishment of a similar grade in the same subject in any other system of schools. Or, the work of the same grade in the same subject may be compared in the different schools of the same city or system. Likewise the work of the individual pupil may be compared with that of other members of his group or with the norm for his age. These tests include intelligence tests, achievement tests, aptitude tests, etc. A chief use of the intelligence tests is as an aid in placing pupils in the rapid, medium, or slow groups according to their ability to progress in their studies. The achievement tests are subject-matter tests, used to determine whether a pupil, grade, or school is up to the established standard or not. The aptitude or prognostic test is used, as the name indicates, to discover the presence of special ability, as mechanical, or musical, or artistic. During the past ten years superintendents have familiarized themselves with these various tests and have made

wide use of them. Boards of education have authorized the purchase of the necessary material for the giving of these tests in order to measure the efficiency of the work being accomplished in their schools.

The "Homemade" Objective Tests

But the test which has proved the greatest boon to the teachers and the pupils of the junior and the senior high schools, as well as to those of the upper elementary grades, is the *modern informal objective classroom test*. This is the test which is displacing the old compositional or "essay" test. This form of test is highly elastic, in that it can be modified and shaped to fit the demands of almost any subject, any textbook, and any teacher. In the first place it is *objective*, that is, it is so contrived that anyone checking the answers will get the same result or grade as anyone else. In this way the grading of a paper ceases to be a matter of personal judgment or personal feeling, and becomes a matter of fact, scientific. The teacher does not "give" the grade. The pupil respects this sort of a test and the resulting grade because he sees that it is as fair to one member of a class as to another. For example, take this question in geometry, Which is greater, a right angle or an obtuse angle?—or this question in physics, Does the attraction between masses vary directly or inversely as the squares of the distances between the centers of mass?—or this question in history, What was the name of the river that Caesar crossed when he began his march upon Rome? A single word answers these questions, and no other answer is right. So, we say that the test is *objective*, not subjective, a matter of fact, and not a matter of someone's personal opinion or assertion. In such a test the pupil can recheck his own paper independently. It may be observed at this point, that there is something peculiarly satisfying to democratic young America in this status of classroom independence. Furthermore, this training in looking to the facts for a decision, whether the outcome is 40 per cent or 100 per cent is the best of training both intellectual and civic.

Another desirable and highly valuable feature of these objective tests is that pupils find them *interesting*; they like them; in addition to recognizing the fact that these tests give them the truth about their progress the pupils come to regard them as an interesting game. Instead of a long grind of writing, continuing through

an hour or longer in class after class, the pupil now has presented to him a list of 25 or 50 or even 100 questions or demands, varied, right to the point, answerable in a word or two each, and so involving no long drudgery of writing. In such an examination the papers are collected, redistributed, checked, graded, recorded, and returned all within the class period. Under this plan pupils soon begin competing with their own records, and so are stimulated to make closer and more discriminating preparation of their assignments in order that they may make higher and higher records in the tests.

Such tests are far more *valid and reliable* than the old form of tests. A single chapter of the text of perhaps 25 pages will be covered by a test of 25 or more questions and demands. This will average one demand or more for each page of the chapter, in this way distributing the demands of the test over every part of the assignment. Under such a system the sampling will tend to be a fair sampling. A larger division of the subject, such as mechanics in physics, or Greece in ancient history, extending possibly through a third of a semester, will be covered by a list of questions and demands ranging from 50 to 100, so testing with reasonable completeness all parts of the subject.

The Generally Used Objective Tests

There are two types of the objective tests in general use. These are the "recall type" and the "recognition type." There are two forms of the recall test: the simple recall test, and the completion test. Under the recognition test are the "true-false," the "multiple-choice," the "best-answer," and the "matching test." In actual practice, the combination test may combine any or all of these forms, using at any point the form of test best adapted to the subject matter under consideration.

Some examples may make these types of tests clearer.

Recall Types

1. *Simple recall*: What was the name of the ship in which the Pilgrims first came to New England?

2. *Completion form*: The name of the chief man in the early history of Jamestown was_____.

Recognition Types

1. *True-false*: The Pacific Ocean was discovered by Balboa. True_____ False_____

2. *Multiple-choice*: The northern general who won fame by his successful fighting in the Shenandoah Valley was: Grant, Sherman, Sheridan, Hooker?

3. *Best-answer*: There are several political parties because

a) It has been customary that there should be;
b) Because people think differently about political problems;

c) Because it is necessary in order to run the government properly.

4. Matching answers:

- | | |
|---------------------|---|
| 1. Cortez | A. Led the Union armies. |
| 2. Ponce de Leon | B. Wrote the Declaration of Independence. |
| 3. Thomas Jefferson | C. Conquered Mexico. |
| 4. Andrew Jackson | D. Discovered Florida. |
| 5. U. S. Grant | E. Won the battle of New Orleans. |

Obviously the recall type of tests requires more effort and knowledge upon the part of the pupil than do the recognition types. The recognition tests, however, give variety, can be given with much rapidity, and are adequate for certain kinds of knowledge.

Good teaching is a thing of the spirit. It requires a free flow of creative energy. It must be happy and vital with abounding life. Anything that exhausts and harasses the teacher is an enemy of good teaching. The grinding drudgery incident to the marking of many papers is, and has been, such an enemy. Nevertheless, if the work of the schools is to be accomplished, there must be the frequent test and examination. The new objective test furnishes the way out. With this new measuring instrument the tests may be as frequent and as searching as desired without inflicting any hardship upon either pupils or teacher. There is no longer the need for spending laborious and dull hours day after day and evening after evening over piles of examination papers. The energies of the teacher may be saved for teaching. The writing of the new test questions will in itself improve the quality of the teacher's choice of objectives. This work, moreover, is constructive and innately interesting. The frequent and thorough tests serve as a strong motivating force for the pupils. The checking of these tests by the pupils is an educative measure of the most valuable sort. So, everywhere there is gain instead of loss, and interest and pleasure in the place of boredom and weariness. The way for the teacher to do more big work is to do less little work.

What Effect Has *the Horizontal Spacing of Classroom Windows on the Distribution of Light?*

Ray L. Hamon and Lloyd H. Taylor

A series of experimental studies are being conducted at George Peabody College in Nashville, Tennessee, to ascertain the optimum arrangement of classroom windows. The study reported in this paper deals only with the effect of horizontal spacing of windows on the distribution of natural illumination on the various desks of a typical classroom. This particular study is not concerned with the required amount of light, the proper orientation, nor the problem of glare.

The Standard Window Arrangement

There is substantial agreement among the educational writers of school-plant literature as to how classroom windows should be spaced. Most recognized authorities and printed plant standards state that: (1) The classroom windows should be placed on the long axis of the room to the left of the pupils. (2) The bottom

of the windows should be about three and one-half feet above the floor, and the tops should extend to within six inches or less of the ceiling. (3) There should be about five or six feet between the front wall and the first window, not more than a foot from the rear wall to the last window; intervening columns and wall sections should be eliminated, and mullions should be reduced to the minimum necessary for the window-operating devices.

This nonsymmetrical horizontal spacing of classroom windows has caused many a controversy between educators and educational consultants and their architects and engineers. If the "standard" window arrangement can be justified, the architect and engineer will have to solve the design and structural problems it presents. On the other hand, if this spacing cannot be justified, we should not detract from the design of school buildings and increase the

cost by insisting on the "standard" arrangement.

For the purposes of this article, the standards pertaining to the side of the room on which windows should be placed and the standards governing vertical spacing are accepted as constant; but the horizontal spacing is considered a variable factor.

Flexibility

Considering our changing philosophies of education and changing conceptions of classroom activities, it is imperative that we plan and construct school buildings with a maximum of flexibility. Flexibility in a school building means a possibility of economically altering the size of classrooms. The exterior and interior side wall are fixed as they are bearing walls or contain bearing columns. It seems then that any flexibility of classroom size must be secured

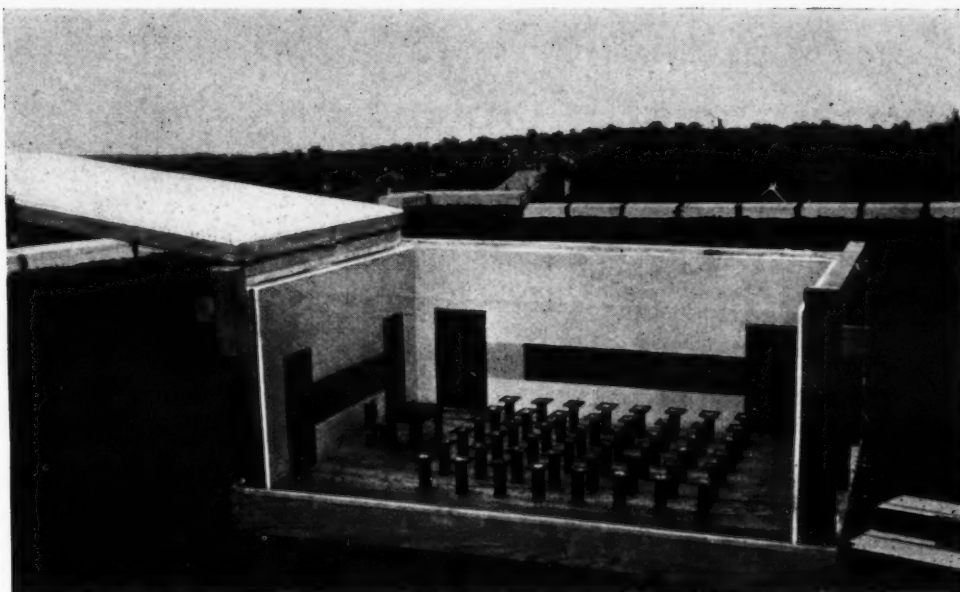
by means of a curtain-wall construction for end partitions.

The criterion of flexibility demands that windows be so spaced that end-partition walls may be moved to alter the size of a classroom. It is possible that the future will demand that some classrooms be cut up for conference rooms or that three standard classrooms be converted into two large classrooms.

Lighting Standards versus Flexibility

It would not be architecturally or structurally satisfactory to set a partition on a mere window mullion. If the "standard" window spacing of five or six feet of dead wall space at the front gives correct lighting, obviously the lighting will not be correct when a partition is set on one of the narrow mullions. About the only flexibility with "standard" rooms is to make a double room by removing a partition. Greater flexibility may be had by spacing the windows in two groups with a wide column or wall section between the groups, thus giving a half-room unit. Even greater flexibility may be secured by spacing the windows of a classroom in three pairs with intervening columns or wall sections, thus giving a third-room unit. The maximum flexibility may be had by installing individual windows with columns or wall sections between, thus providing a five-foot unit. Rooms may then be arranged in any multiple of five feet.

The greater the flexibility, however, the greater the conflict with the "accepted standard" for spacing classroom windows. The purpose of this series of experiments was to ascertain what justification there is for the "standard" window arrangement. This particular paper proposes to ascertain which arrange-



MODEL CLASSROOM WITH THE TOP TURNED BACK AND THE WINDOW PANEL REMOVED

The model is shown by an accompanying illustration which shows the top turned back and the interior exposed. The four accompanying figures are plan views of the exterior wall of the model classroom showing the four different types of window arrangements. Figure 1 is the "standard" arrangement. Figure 2 is an arrangement with two sets of triplet windows giving a 15-foot construction unit. Figure 3 is an arrangement with three pair of windows giving a 10-foot construction unit. Figure 4 gives individual windows and provides for a 5-foot construction unit.

Light intensity was measured in foot-candles by means of a Weston photonic foot-candle

ings, the farther away we get from the "standard" arrangement, the better the distribution of light. This is evidenced by the lowest range and lowest standard deviation with the windows placed individually with intervening columns or wall sections between all windows. This is also the arrangement of windows which gives the maximum flexibility.

This study forces the writers, somewhat against their will, to the conclusion that we can secure better distribution of light by abandoning the "standard" battery arrangement of windows and spacing them symmetrically along the length of the classroom with intervening columns. It should be kept in mind

		(front)							
	95	60	45	30	27.5	22			
	101	70	60	32	27.5	22			
	105	71	58	36	26.7	24			
(left)	103	75	55	37	28	25.5			
	105	77	54	36	28.5	25			
	107	73	53	34	30	22.4	(right)		
	100	85	50	34.5	28	23.5			
	102	75	52	33	28.2	22.7			
					(rear)				

Chart 1. Showing the Foot-Candle Reading on Each Desk with Window Arrangement as Shown in Figure 1.

				(front)					
	105	68	48	34	32	23			
	105	68	50	35	30	23			
	87	65	45	38	29	23.5			
(left)	80	65	48	38	29	24.4			
	92	70	50	35	29	24			
	98	80	48	35	30	22	(right)		
	100	78	48	35	28	23			
	105	70	50	35	28	22			
					(rear)				

Chart 2. Showing the Foot-Candle Reading on Each Desk with Window Arrangement as Shown in Figure 2.

				(front)					
	90	65	48	33.5	28.5	22			
	85	65	50	34	28	22			
	92	65	50	36	27.5	23			
(left)	98	68	50	38.5	26.5	23.5			
	92	65	50	36	27	22.5	(right)		
	85	65	48	34	27.5	20.5			
	95	72	50	34.2	25.5	22			
	93	67	48	34	27.5	21.5			
					(rear)				

Chart 3. Showing the Foot-Candle Reading on Each Desk with Window Arrangement as Shown in Figure 3.

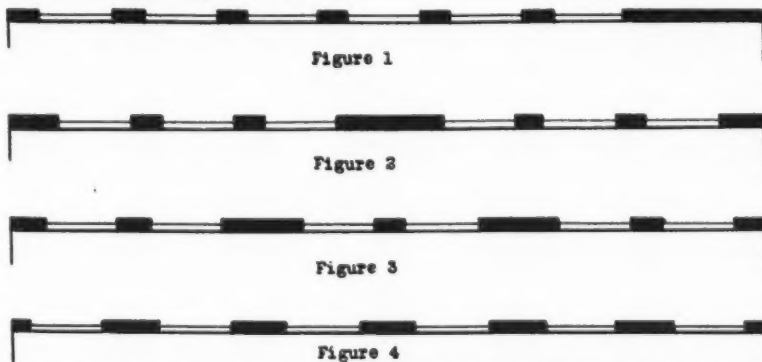
				(front)					
	95	65	45	31.5	30.5	23			
	90	65	50	34.2	28.5	23			
	95	65	47	35.5	27.5	25			
(left)	88	67	48	36	27.5	25			
	90	65	50	34.5	28	24.5	(right)		
	90	65	48	33	27	22			
	88	72	45	32	26	23			
	80	68	50	30.5	26.5	21.8			
					(rear)				

Chart 4. Showing the Foot-Candle Reading on Each Desk with Window Arrangement as Shown in Figure 4.

ment will give the best distribution of light among all the desks in the room.

Experimental Equipment Employed

A model classroom was constructed one-eighth actual size. This model represents a room 23 by 30 by 12 feet with 48 seats. It meets the generally accepted standards regarding built-in features, color scheme, unilateral lighting, vertical spacing of windows, and glass area. The only variable in this model is the horizontal spacing of windows.



FOUR FIGURES SHOWING THE PLAN VIEWS OF THE EXTERIOR WALL OF THE MODEL CLASSROOM WITH THE FOUR DIFFERENT TYPES OF WINDOW ARRANGEMENTS

One side of the model is solid glass. Four panels were constructed to place over this glass so as to represent four different window arrangements. In each of the four window arrangements the exposed glass area is one fifth of the floor area.

meter. The two-inch cell was placed on a desk inside the model and connected by a wire through the floor of the model to the meter on the outside. The cell could be moved from desk to desk by lifting the cover of the model.

The Readings

The readings were taken out of doors with the windows away from the sun. Forty-eight readings were taken with each type of window arrangement. If the outside light varied appreciably during the time the readings were being taken, the entire set of readings was discarded. Only one set of readings is shown in the accompanying charts. The reading on each desk is shown in the charts in the relative position of the desk in the model. The readings are rather high as they were taken on a bright day, the model had fresh paint, there were no pupils, and window shades were not drawn.

Conclusions

The table showing the variability of the distribution of light with various types of horizontal window spacings indicates that the distribution factor is in harmony with flexibility but in opposition to the "standard" window arrangement. In fact, according to these read-

Table Showing Variability of Light Distribution with Various Window Arrangements

Window Arrangement	As Shown By Figure	Data from Chart	Total Range Between Darkest and Brightest Desk	Standard Deviation of Readings	Reading on Darkest Desk
"Standard"	1	1	85.0	33.6	22.0
Arranged for a 15-foot unit of room length . .	2	2	83.0	30.3	22.0
Arranged for a 10-foot unit of room length . .	3	3	77.5	27.9	20.5
Arranged for a 5-foot unit of room length (maximum flexibility)	4	4	73.2	27.3	21.8

that this study deals only with distribution of light and does not attempt to measure glare.

Checks on the Experiment

The experiment was repeated under different conditions with different light intensities. The results were the same.

The data reported in this article were taken when the glass area was 20 per cent of the floor area. The experiment was repeated with 25 per cent glass area and again with 15 per cent glass area. The results were all substantially the same.

The same equipment is being used for further studies. A window-shade study is now in progress. A study of glare is contemplated.

To the Members of the Department of Superintendence: Open Letter Number Six

Preliminary Report On The General Program

For some reason the fourth letter "Interpreting the Schools to the Public" seems to have drawn more comment than any of the others. I present herewith one of the letters I received which expresses an important point of view so concisely and carefully that no further comment is needed. The writer, my father, Dr. H. L. Stetson, is president emeritus of Kalamazoo College, has a long record as a minister, college professor and president and speaks "as one having authority." His friendship for the public schools is unquestioned. His analysis of the contribution of the public schools to our national security, I know, will be of interest and of value to the readers of the SCHOOL BOARD JOURNAL.

Grand Beach, Michigan
August 25, 1933

Dear Paul:

I have been thinking about your statement that it is necessary to teach the public the importance of education to its welfare. At first sight that would seem a strange and unnecessary proposition in view of the enormous amount of money which has been invested by the public during the past fifty years in educational equipment, but I think you are right in saying that people need to be told of the value of education to the community as a whole. In the magazine section of the New York Times, August 20, 1933, is an article, "A French View of Resurgent America," by Andre Maurois, in which he says he is surprised at "the absence of extreme political opinions among this mass of unemployed. In a European country one could not imagine 30,000,000 beings living in such miserable conditions without propagating revolutionary movements among themselves. These movements would take diverse forms: fascism, communism, socialism; but whatever their forms, they would be violent. I have met, in America, unemployed men who were inclined toward radical solutions, but their number was relatively few. In Chicago a young Socialist told me that out of 800,000 unemployed he thought less than 2,000 held really extreme sentiments. These 2,000 could, on occasion, make a lot of noise, annoy the police or torment the relief station; but they were powerless to start the masses going. In New York the faces are even calmer than they are in Chicago. In the clubs of the unemployed the men sing bitter but inoffensive songs. The demonstrations in the Union Square are nothing but symbols."

The foreigner asks himself: "How is this possible. It seems that the larger number of these men, in spite of their distress, preserve an immense hope."

These words are very significant. What is the source of this "immense hope." I think it is found in two closely allied yet distinct causes, religion and education. The amount and quality of public education which have been provided so liberally in this country for many generations has given it a self-contained population that can and does meet severe experiences with unexampled restraint and rare courage. Could this country have passed through the severe trials of the last few years without any serious riots, or even the idea of a violent revolution, if the people had not been trained in the schools which they have created and maintained? It seems to me here is a very convincing argument in support of the most liberal maintenance of the schools possible. They have given this country a people who have developed the ability to hold themselves in perfect control and face their future with intelligent courage.

I believe that there is a subtle opposition to all forms of universal education that is due to several causes.

One is financial. There have always been people who fight the schools on the ground of their cost to them in taxes. Such people always oppose all expenditure of money for any purpose.

Another is the fear of the employers of labor that if the people are educated there will not be enough left who will be willing to work for low wages. A representative of this class once said to me, "If we

go on educating the boys and girls there will be none left who will accept present labor conditions." There is more of that sentiment than one would think possible.

Third, the violent revolutionists. They dislike so much education for all because they need for their purposes people who can be led through an appeal to their lower or selfish interests — the unthinking.

Fourth, the indifferent, who do not care what happens to other people. So they are safe and prosperous, the devil may take all the rest, so far as they care.

Here, roughly, is what I have been thinking since I read what you said. Even before that the same thoughts had been running through my mind.

Father.

The general program for the Cleveland meeting is "shaping up" very nicely. There is no "theme" for the meeting as has been customary for several years but each general session is built around one of the seven general topics assigned to the subject committees.

For example, at the general session Monday morning the topic "Education for a New America" will be discussed from various points of view by Dean William Russell, of Teachers College, Columbia; Dr. Payson Smith, State Commissioner of Education of Massachusetts; Dr. John Huston Finley, editor, New York Times; and Dr. Harold G. Campbell, Deputy Superintendent of New York City.

Monday afternoon the general topic is "A Comprehensive Program of Public Education." Mr. Howell Cheney, manufacturer, South Manchester, Connecticut, has tentatively accepted an invitation to address the convention at this meeting. In addition, Supt. Frank Pickell, Montclair, New Jersey; Supt. Thomas Gosling, Akron, Ohio, and Dean James Edmonson of the School of Education of the University of Michigan will speak.

Tuesday morning some important "National Problems in Education" will be presented by men who are authorities on the various phases of this subject. Mr. Merle Sidener, president of Sidener, Van Riper and Keeling Advertising Company, Indianapolis, will discuss "Interpreting the Schools to the Public"; Pres. Robert R. Moton, of Tuskegee Institute, will tell of the problem of Negro Education, and Prof. Arthur B. Moehlman, School of Education, University of Michigan, has for his topic, "Teacher Training—An Administrative View." Other important national problems will be presented.

Wednesday morning the addresses will revolve around the subject "Public Education and Public Welfare." The speakers include United States Commissioner Dr. George F. Zook; Edward Filene, merchant, Boston; and Dr. E. C. Hartwell, Buffalo, New York.

Thursday morning the reports of the general subject committees will be given.

The meeting at Cleveland will not be spectacular, but it will be a working conference devoted to current educational problems of magnitude and importance. Every superintendent as a member of some important group will have a chance to make an important contribution on some specific question. When you go home from the Cleveland meeting we want you to take with you not only "inspiration" — which is very important — but also practicable and concrete solutions to your most pressing problems. With your enthusiastic help our aim will be accomplished.

These are wonderful days for our nation and, therefore, for our schools. If we have been dis-

couraged we should now be enheartened. The victory will go to the wise, the patient, and the courageous.

Yours faithfully,

PAUL C. STETSON,

President.

P.S. Please send me any comments which may occur to you on the general educational situation, the program for the Cleveland meeting, these "open letters," your opinion of the mayor, or what you will. Your comments will be helpful and appreciated. — P.C.S.

STOKERS: ARE THEY AN ECONOMY?

To the Editor:

In the September issue of the SCHOOL BOARD JOURNAL, Mr. R. C. Demary writes about the economy of using stokers for firing boilers.

While it is generally admitted that stokers will burn poorer or cheaper coal, and burn it more efficiently, there are a few practical questions which seem to intrude themselves and which I would like to have answered after a scientific study of the problem was made. I find that often school boards or superintendents are wont to represent great savings as a result of expenditures incurred without at the same time counting in all the costs.

Mr. Demary does not state whether the efficiency of a stoker of 72 per cent was developed in a down-draft boiler, where green coal is fed on top of a fire but not in the way Mr. Demary implies, choking the fire. There is no necessity of introducing large amounts of air into the boiler under such conditions.

And then again, against the purported saving in coal cost must be set up the cost of installing such a stoker, its maintenance, its depreciation, and the cost of electricity or power with which to run it. Let us take an example of a stoker which costs \$2,000 installed. If the life of this machine is 20 years, we will count depreciation of \$100 a year, and we have the following bill of expense annually:

Depreciation	\$100
Interest at 6 per cent.....	120
Cost of maintenance (average).....	25
Cost of electricity for operation.....	121
Total	\$366

While this may not be a large sum, it is an item of expense and outlay that should be considered. Now as to the saving purported to be made by the school board at Cloquet, Minnesota, I do not know. But, I do know that while Cloquet operates its boilers by stokers and we don't, the records show that they have spent in 1931-32, 6.3 per cent of their budget for janitors' supplies and fuel, while we have spent for the same period 6.1 per cent, and Two Harbors, not using stokers at that time, spent only 4.6 per cent the same year. If to this amount we should also add the other costs above indicated of about \$366 for each stoker, there is a real question as to economy in providing stokers.

And the saving of \$1,667 reported by the Cloquet board of education is not ear-marked so that we do not know to what the saving was due. During my visit to Cloquet last winter with a committee of my board of education, we were told that the amount of coal used is about the same as before, only that they are able to burn much cheaper coal.

Upon further inquiry we were told that the board used to buy Pocahontas coal at about \$10 to \$12 a ton, and now that they paid only \$6.10 a ton. But, why did they burn Pocahontas coal? We are burning a good grade of run-of-pile coal at \$7 a ton, delivered into our bins. At that rate they are saving only 90 cents a ton on coal, and by comparison saving 90 cents on a ton on 125 tons per boiler which we burn makes a saving of only \$112.50, while the cost of the outlay and operation of the stoker seems to be much higher than that.

And then are we to supplant hand labor with machines? I am interested in the question of stokers because my board of education contemplated buying them last winter, but postponed action until funds are available. I would like to hear from others interested in this subject.

A. I. JEDLICKA

Proctor, Minnesota,
September 7, 1933

Responsibility in Administering the Budget

Lynn E. Castle, Riverside, Illinois

The school executive who proposes to administer his school in terms of a budget is accepting two major responsibilities. He says to the board of education, "Here is my program for this school system for one year. It will cost so much. The money can be raised in this way. If you will levy so much in taxes and make appropriations thus and so, I propose with your consent, first, to carry out this program of education for a year without exceeding your appropriations, and second, to furnish you with information by which you can appraise the results of my administration."

The first major responsibility which the school executive accepts is to carry out an educational program for the year without allowing the total appropriations or any of their major divisions to be overdrawn. In other words, he agrees to see that the school lives within its income, an important consideration at any time, but particularly in times of reduced school support and active public criticism of public expenditures.

Such a responsibility is not easy to discharge. Several things may happen to defeat the superintendent who tries it. He may have no really comprehensive and organized program for his school; or having it, he may fail to embody his program adequately in the budget. He may fail to stick to his program or fail to get the full cooperation of his staff in carrying it out as embodied in the budget. The board, while giving nominal consent to the budget, may later step in to make expenditures not included in the first estimates. The hazard of unpredictable contingencies is always present. Finally, with the best program in the world, the executive's records may not be adequate to show him when contract obligations have exceeded budgetary appropriations.

Causes of Failure

The superintendent's failure to set up a comprehensive administrative program for the year may be due to a lack of fundamental knowledge of school administration and instruction. The untrained superintendent is still with us, whether promoted from the ranks of efficient classroom teachers or attracted from professional and business pastures for the moment less green. Lacking systematic training, the superintendent may find it difficult to provide himself with information regarding the needs of his school. How to estimate a teacher's preparation and experience, how to measure or evaluate the effectiveness of instruction, how to diagnose the community needs of the children, how to keep and how to use records of previous school expenditure, all these are technical to a degree which definitely handicaps the superintendent who attempts to pick them up on the job. Without them the task of planning an effective modern school program has become virtually impossible. Fortunately for the children, there is nothing to prevent untrained superintendents from making haste during the summer to remedy their deficiencies in technical training through the courses offered by state universities and other institutions of recognized standing.

Failure to stick to a program, however good or poor, is a common source of difficulty to the budgeting superintendent. It is so easy for new items to come up during the year, calling for unplanned expenditures. These things, as Hunter of the University of Denver has it, "are frequently desirable in themselves, but in the light of the main aims of the school program, not justifiable." It would be instructive for any superintendent to keep a list of the items calling for unplanned expenditure which come up for consideration in his school district during a single year. The superintendent who attempts to keep his school within its budget is forced constantly to ask himself, "Do these things fit into the program of the year as originally set up?" If they do not, he must postpone action on them until they can be included in a later yearly program before adoption of the budget by the board.

An Educational Program in Financial Terms

On the other hand, he should not regard the budget merely as the watchdog of the treasury.

This he will be likely to do if it is handed down by the board instead of being his own. A budget is the superintendent's proposed program for the year, translated into terms of income and expenditure. When approved by the board it becomes the working machinery by which he accepts and carries the administrative responsibility for his program, and finally one of the means of appraisal of that program by the board.

A superintendent with a well-made program and the ability to carry it out may experience difficulty through lack of cooperation of his staff. Delegation of responsibility to the heads of departments and to teachers for proposing portions of the budget before it is put into final form, and working out each part in cooperation with the staff members involved, is most necessary if all hands are to work together to make the program a success. The superintendent who prefers to play Santa Claus or the petty tyrant, carrying the whole responsibility for financial matters, cannot expect cooperation in his attempt to keep the school within its income.

Cooperation of staff members in budgetary administration is made easier if the scope of each department is clearly defined, and the responsibility for each kind of activity clearly fixed. The school handbook, worked out in the local school over a period of years, stating in black and white the policies of the school and the organization of its parts, is a great help. Responsibilities which are defined clearly enough to be set down in writing are not so likely to overlap nor to leave areas of activity unprovided for.

Inexperienced teachers or principals may be taken into conference while the superintendent plans for them. Staff members who prefer the "hand-out" plan because they can work it for their own advantage or for their departments, either through the superintendent or over his head, are a hazard to the success of any organized plan of budgetary administration, but the budget, if courageously used, is the most effective defense against them.

Coöperation of the Board

Coöperation of staff members in budgeting is difficult to maintain unless the superintendent has some effective means of holding them responsible for results. We still lack adequate measures of much of the work of our schools. Subjective judgment must be resorted to, a large part of the time. The superintendent who can look upon the work of his associates with a discerning eye and praise or criticize it with an understanding heart is the only kind of superintendent who can hope to have the wholesome coöperation which he needs from his staff in the attempt to give children the best which the income of their district will afford.

Coöperation of all members of the board of education is just as essential. Unless the members clearly understand the nature of the responsibility which they have delegated, and have confidence in the superintendent's ability to discharge it, they may themselves hinder the effective administration of the budget. Not having the educational program as clearly in mind as the superintendent, it is easier for board members to lose sight of the whole when isolated needs of the school are brought to their attention during the year. The superintendent should not, but probably will be held responsible for expenditures which were not included in his original estimates, even though these additions be initiated by board members. This emphasizes the importance of having the estimates adequately made at the outset, based on accurate and complete knowledge of the needs of the children and of the relative instructional values in meeting those needs. Then when proposals for unauthorized expenditures arise from any source, the superintendent is in a position to point out their value in comparison with the provisions of the original budgetary plan. Unless he can do this, he is at the mercy of influences which may have little connection with his instructional program.

Another essential for the superintendent, who would successfully administer a yearly budget, is a system of accounts which will show him, month by month, not only the actual expenditures but the contract obligations which are to be charged against

budgetary allowances, so that he may know at all times the unencumbered balance which is still available in each fund for meeting proposed expenditures. A plan which has been found useful in providing this information may be outlined briefly as follows:

A Checking Plan

1. The secretary's records include a distribution ledger carrying a separate expenditure account for each division of the budget. A multiple-column page may be used. In states where a uniform system of financial accounting has been adopted, these forms are provided and the distribution of expenditures is specified more or less explicitly. Where there is no uniform state system, the local school may well refer to the set of classifications recommended by the U. S. Office of Education in its Bulletin, 1928, No. 24, *The Report of Committees on Uniform Records and Reports*, or to those given by the National Education Association in its Research Bulletin, Vol. 5, No. 5, on *School Records and Reports*. These classification headings may be either simplified or further subdivided according to the size and needs of the local school system.

A simple set of classifications based on the above sources, which the writer has found useful in planning the budget and in distributing receipts and expenditures in a small school system is given in Table I.

In order to separate expenditures by departments and buildings, a simple code letter may be used in accounting. This code letter is entered by the secretary on the same line with the item, in the distribution ledger. By reference to the code letter all the items for the month or the year for a given department or building can be readily picked up and totaled on the adding machine. For example, the writer used "e" for elementary, "s" for secondary, etc., designating the kindergarten, the physical-education, music, vocational agriculture and other departments by a similar use of initial letters. Numbers or signs would do as well. Only those departments in which costs were being particularly watched were coded. Operation, maintenance, insurance, and equipment charges were similarly marked with a code letter designating the building, to facilitate gathering of costs by plant units. Some of the items of expenditure, especially the instruction items, carried two code letters to show their relation both to department and to building.

Using a Code Plan

Although it sounds somewhat complicated, this coding takes very little extra time and trouble in actual practice and yields valuable returns, for without it a large part of the cost information necessary for appraisal purposes, as described below, could not be obtained unless an extra set of ledger accounts by buildings and departments were maintained.

2. Each invoice or voucher, before it is submitted to the board for approval, is clearly marked with the name and number of the budget fund to which it is to be charged, and with the code letters showing the building or department benefited. Items which admit of no confusion may be classified by the secretary, but unless this officer has made a thorough study of current practices and become familiar with the functional values involved, it is difficult for him to make consistent distinctions between administration and instruction, between operation and maintenance, between supplies and equipment, and particularly between many of the items of a strictly instructional nature. The logical person to make decisions as to the distribution of these doubtful items of expenditure is the superintendent, particularly so in view of the close relation of such distributions to his budget. For this reason it has become the practice of most districts which are carrying out successful budget plans to have all invoices or vouchers pass over the desk of the superintendent some time prior to the monthly meeting, to be sure that they are allocated to the proper divisions of the budget before final approval by the board.

After approval, and before the next meeting, the secretary records them in the distribution ledger

TABLE 1. A SET OF ACCOUNTING CLASSIFICATIONS FOR THE SCHOOL BUDGET

A. Receipts Accounts	
Code	Revenue Receipts
1	Taxes
2	State and federal aid
3	Tuition
4	Sale or rent of school property
5	Other revenue receipts
	Nonrevenue Receipts
6	Sale of bonds
7	Sale of warrants or short-term loans
8	Refunds
9	Revolving funds and stores receipts
B. Expenditures Accounts	
	Administration
10	Salary of secretary of the board of education
11	Board-of-education expense
12	School elections; census (easily separated for cost computations)
13	Legal services
14	Salary of superintendent of schools
15	Clerical service
17	Office supplies
19	Other administration expense
	Instruction
20	Salaries of principals and supervisors
21	Salaries of teachers
22	Free textbooks
23	Supplementary textbooks
24	Classroom and departmental libraries
27	Instruction supplies
29	Other instruction expense
	Operation
30	Wages of janitors
31	Drayage, laundry, and other services for operation
32	Fuel
33	Light and power
34	Water
37	Janitor's supplies
39	Other operation expense
	Maintenance
41	Repair of buildings
42	Repair and replacement of service systems
43	Upkeep of grounds
44	Repair and replacement of equipment
	Auxiliary Agencies and Coordinate Activities
51	School nurse, salary, and supplies
52	Libraries
53	Parent-Teacher Association and other outside organizations
54	Other auxiliary agency expense
	Fixed Charges
61	Insurance
62	Employer's liability
63	Rent
	Debt Service
71	Redemption of bonds
72	Interest on bonded indebtedness
73	Redemption of warrants and short-term loans
74	Interest on warrants and short-term loans
	Capital Outlay
81	Land for sites
82	New buildings
83	Equipment for new buildings
84	Alterations of old building (not repairs)
85	New equipment for old buildings (not replacements)
86	Improvement of grounds
	Revolving Funds and Stores
91	Books and supplies for sale to children
92	Revolving funds for special groups and activities

and brings down a total for each account. These totals are listed on a summary sheet together with the balance in each fund, and made available to the board and to the superintendent.

Keeping Track of Current Charges

3. A part of these monthly balances, however, may represent contract obligations and orders for which invoices have not yet been presented. These obligations must be kept track of by means of temporary memoranda each month by the superintendent, the secretary, and any member authorized by the board to make purchases or obligations, and these memoranda should be in the superintendent's hands at the time he plans additional expenditures. Added to the secretary's expenditure totals for each budget fund, they show what portion of the fund already has been spent or obligated, and by subtraction from the original yearly appropriation, the amount still available in each fund for use. Without such up-to-the-minute information some of the budget divisions are easily overdrawn or brought so close to the limit that later emergencies make it necessary to overdraw them.

These three accounting essentials—a system of classified and coded expenditure accounts, an accurate classification of vouchers, and a plan of temporary memoranda of recent obligations and purchases—furnish the superintendent with information needed in the current administration of the budget.

Unforeseen Contingencies

This brings us again to unforeseen contingencies, the hazard of all hopeful planners. Although with more adequate information and better planning he may reduce them to the minimum, the superintendent will often be faced with needs in his school which could not be anticipated and placed in the budget. Three courses are open to him. He may "cushion"

his budget with miscellaneous or contingency items, he may transfer unused funds from one division of the budget to another, or he may ask the board to increase the total by additional appropriations.

The first course leads toward careless planning and loose classification, and should be reduced to a minimum as experience shows the way. Accurate records of previous years will help him to avoid overloading the miscellaneous compartments of the budget.

The second plan is more desirable than the first in that it is done with eyes open to the real nature of the transaction. There is no "lumping off" of unrelated items under an ambiguous heading. Transfer of funds from one budget division to another, however, demands the same clear-sighted deliberation with which the budget was originally adopted, since it involves a reversal of decisions made at that time. Such changes in the original budget should be made only by board action upon the superintendent's recommendation.

The third plan of meeting unforeseen contingencies, that of increasing the total budget, can be used only when additional funds are available. If such is the case, and the emergency cannot be taken care of from original appropriations without handicapping the instructional program, the superintendent is justified in asking the board to vote the increased appropriation. This act is comparable in nature to the adoption of the original budget and should be handled in the same way.

The difficulties to be met in administering his school system within the limits of a budget should not deter the superintendent from making the attempt in the interest of greater educational values for the children of his district. These values have to be bought, and no other person is so well prepared to be a thrifty marketer for them as he. Experience will increase his information and perfect his judgment, so that the fifth yearly budget is pretty sure to work better than the first.

(To be concluded)

CHECK LIST for Determining Possible Economies in School District Debt Service

H. H. Linn, Assistant Superintendent in Charge of Business, Muskegon, Mich.

Editor's Note: This is the fourth installment of Mr. Linn's valuable series, *A Check List for Determining Possible Economies in School Administration*.

DEBT SERVICE

Bonds

- 1.. Is it a policy of the board of education to pay for capital improvements on the pay-as-you-go basis rather than by the issuance of bonds?
- 2.. Are legal restrictions sufficiently severe to safeguard the public interest against the issuance of excessive amounts of bonds?
- 3.. When the electors are required to approve bond issues, are they well informed regarding the contemplated activities so they can vote intelligently?
- 4.. Is the public interest in bond elections sufficient to prevent small minorities from voting bonds for questionable or doubtful purposes?
- 5.. Is it a practice of the local school district to issue serial bonds in preference to straight-term or sinking-fund bonds?
- 6.. Do the complete bond issues mature within a reasonably short period of time; preferably not more than twenty years after issuance?
- 7.. Are bond maturities arranged so that a part of the principal is paid, beginning with the early years of the issue?
- 8.. Are the following pertinent points considered in arranging for the sale of bonds:
 - a) .. Are the bonds issued in denomination of \$1,000?
 - b) .. Are interest payments made semiannually?
 - c) .. Are principal and interest made payable in one of the larger financial centers?
 - d) .. Are bonds prepared in such manner as to make forgery most difficult?
 - e) .. Are provisions made for registration in owner's name where municipality has proper facilities for handling same?
 - f) .. Is a competent attorney retained to advise the board of education in regard to the proper steps to be taken in the early stages of the bond proceedings in order to avoid embarrassing legal technicalities?
 - g) .. Is the sale of bonds advertised in a financial publication of nation-wide circulation among municipal bond buyers, and are the bonds awarded in accordance with the terms of the advertisement?
 - h) .. Are the bidders given an opportunity to specify—within legal limitations—the interest rate or rates they will pay for the issue?
 - i) .. Is it a practice to sell bonds with a low interest rate near par, rather than to sell bonds bearing a higher rate of interest at a premium?
 - j) .. Are bonds sold by sealed bids or auction sale, rather than by private sale?
 - k) .. Are prospective bidders provided with a complete statement giving them all the details they wish so they can submit their best bids?
 - l) .. Must bidders submit certified checks or bid bonds for a reasonable amount with their bids on bond issues?
- 9.. Are general financial conditions considered so the

time for selling bonds may be arranged to get the benefit of favorable interest rates?

- 10.. Is the possibility of securing lower interest rates during certain months and seasons of the year when money rates are favorably considered when arranging the time for the sale of bonds?
- 11.. Are bonds sold with a callable or optional feature when interest rates are high?
- 12.. If funds must be made available and financial conditions and interest rates are not favorable, may the bond sales be temporarily postponed and the money secured:
 - a) .. By temporarily transferring money from one fund to another?
 - b) .. By borrowing money from some financial institution on a short-term basis?
- 13.. Are bond and interest payments made promptly when due so that a high rating is maintained with bond houses and buyers?
- 14.. Are bonds refunded at a lower rate of interest, if and when, this may be done with profit to the school district?
- 15.. If bonds may be purchased on the open market at a discount and if the district has surplus money available, has consideration been given to the advisability of retiring bonds ahead of the schedule?

Interest on Other Than Bonded Indebtedness

- 1.. Is the period for tax collection arranged so that the schools may operate with a minimum of temporary borrowing of funds?
- 2.. Are any provisions made for receiving receipts from other sources than taxation at such times as to reduce the amount of temporary borrowing?
- 3.. Are tax collections and other sources of revenue received promptly when due, thus limiting the need for temporary borrowing?
- 4.. In order to avoid short-term loans, does the school, within legal limitations, temporarily transfer money from one fund to another with the distinct understanding that repayment will be guaranteed and properly safeguarded?
- 5.. Are banks required to bid for the privilege of making short-term loans to the school districts?
- 6.. Is a minimum rate of interest paid on these short-term loans?
- 7.. Is it a policy of the board not to permit expenditures to exceed receipts, with a resulting deficit that must be carried by borrowing?
- 8.. Is floating indebtedness held to a minimum?
- 9.. If the district has a large floating indebtedness requiring a high interest rate, has an effort been made to retire all, or part, of this indebtedness by increasing the tax levy or reducing expenditures?
- 10.. If floating indebtedness cannot be reduced within a reasonable period of time, has consideration been given to the issuance of bonds or notes drawing a lower rate of interest?
- 11.. Has the board considered the possibility of issuing warrants at a lower rate of interest than that paid at present on interest-bearing warrants?
- 12.. Has the possibility of borrowing money from banks at a lower rate of interest than that paid on interest-bearing warrants been considered?
- 13.. Has the possibility of offering short-term notes or certificates of indebtedness for sale to the general public at reasonably low interest rates been considered when temporary borrowing must be arranged?

(To be concluded)



CENTRAL ENTRANCE, GRANT JUNIOR HIGH SCHOOL, SYRACUSE, NEW YORK
Randall and Vedder, Architects, Syracuse, New York.

A Complete *Junior High School*

The Grant Junior High School, Syracuse, New York

Messrs. Randall and Vedder, Architects, Syracuse, New York

The increasing number of variables which enter into the design and construction of secondary-school buildings is responsible for the increasing variety in the general plan, as well as the details, of new junior-high-school buildings. Local conditions of site, educational program, teaching method, etc., have entered into the plan of the Grant Junior High School, Syracuse, New York.

The building, which is located in a dignified residential section of Grant Boulevard, has been beautifully developed in a modified modernistic style. The exterior walls are faced with a dark-buff brick and the trim is of a local litholite stone. The building, which was occupied for the first time in September, 1933, is three stories high and contains a basement under a small section to include the boiler room, storeroom, and space for the janitor.

The building has been erected under the appropriation of Mayor Rolland B. Marvin, and the Syracuse Department of Public Works, with the coöperation of the superintendent, G. Carl Alverson, and the board of education, composed of Walter B. Goulding, Harry J. Clark, Elizabeth C. Robertson, N. Wesley Markson, Charles L. Amos, Patrick J. Loughrey, Linda Hall Larned, and the various heads of school departments.

Due to the high cost of the site and the necessity of devoting a maximum amount of space to the playground, a most compact rectangular plan was adopted. The auditorium

forms the interior of the great cube of the building and the gymnasium which serves also as stage adjoins to the rear.

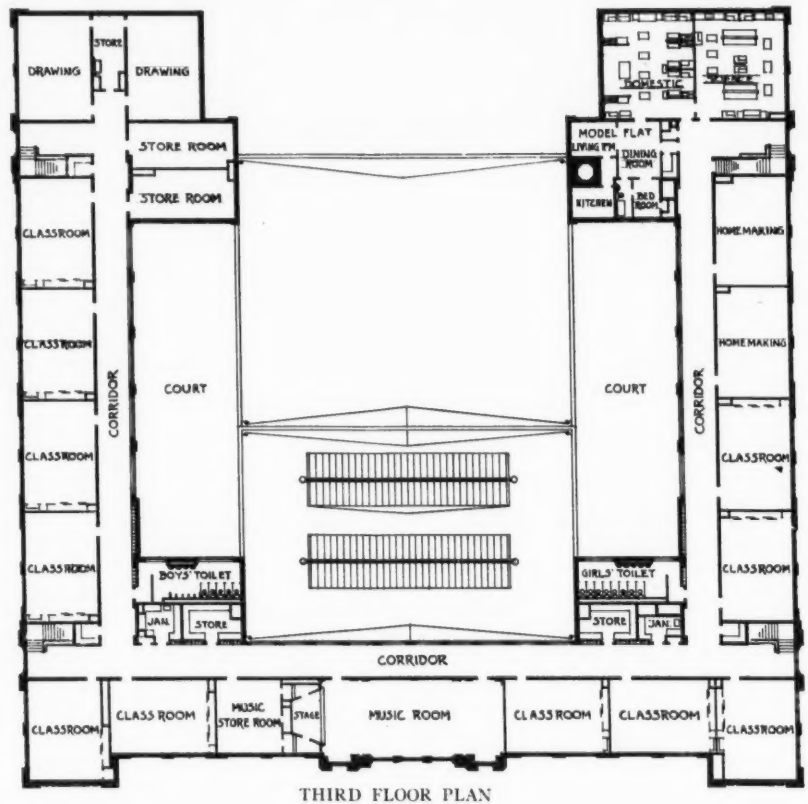
On the first floor are the following rooms: ten classrooms; one kindergarten, with adjoining service rooms; one cafeteria, with kitchen,



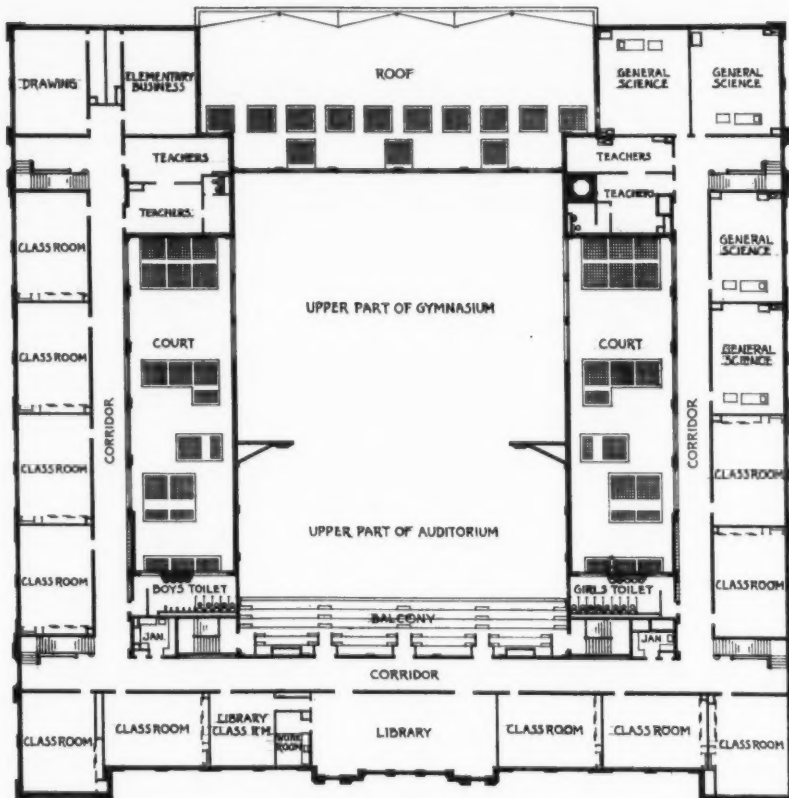
AUDITORIUM, GRANT JUNIOR HIGH SCHOOL, SYRACUSE, NEW YORK
Randall and Vedder, Architects, Syracuse, New York.



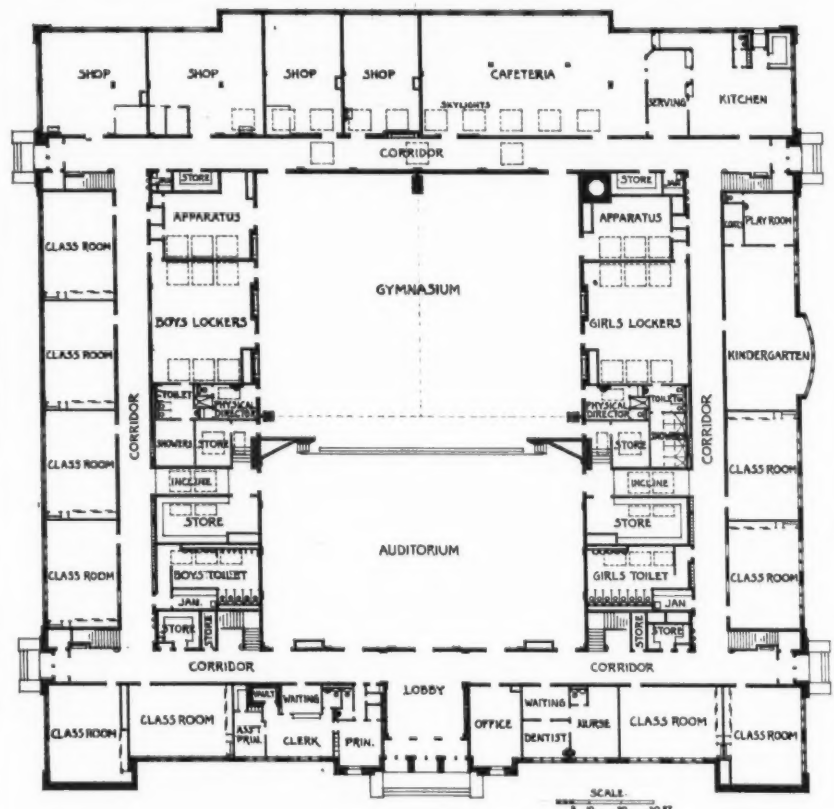
MUSIC ROOM



THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

GRANT JUNIOR HIGH SCHOOL, SYRACUSE, NEW YORK
Randall and Vedder, Architects, Syracuse, New York.

serving room, and storerooms; four shop rooms for industrial arts; one administrative suite, with a public office, a principal's room, space for the clerks, a vault, storeroom, boys' and girls' toilets; one health office, with separate rooms for the dentist and the nurses.

The most interesting room on the first floor is the auditorium, which is 98 ft. wide and 60 ft. deep, and is equipped with 850 seats on the main floor and 200 additional seats in the balcony. The stage which is 98 ft. wide and 76 ft. deep, forms the gymnasium. A fireproof and soundproof sliding partition separates the gymnasium from the auditorium, and further sliding partitions make it possible to divide the gymnasium for separate use by boys' and girls' clubs. The gymnasium has adjoining it adequate locker rooms, storerooms for apparatus, and space for the physical directors.

Immediately outside the auditorium and gymnasium and separating these rooms from

the classrooms, are wide corridors, with terrazzo floors, which have been planned especially for rapid change of classes. Six complete stairways make travel from floor to floor easy and rapid. There are five exterior exits.

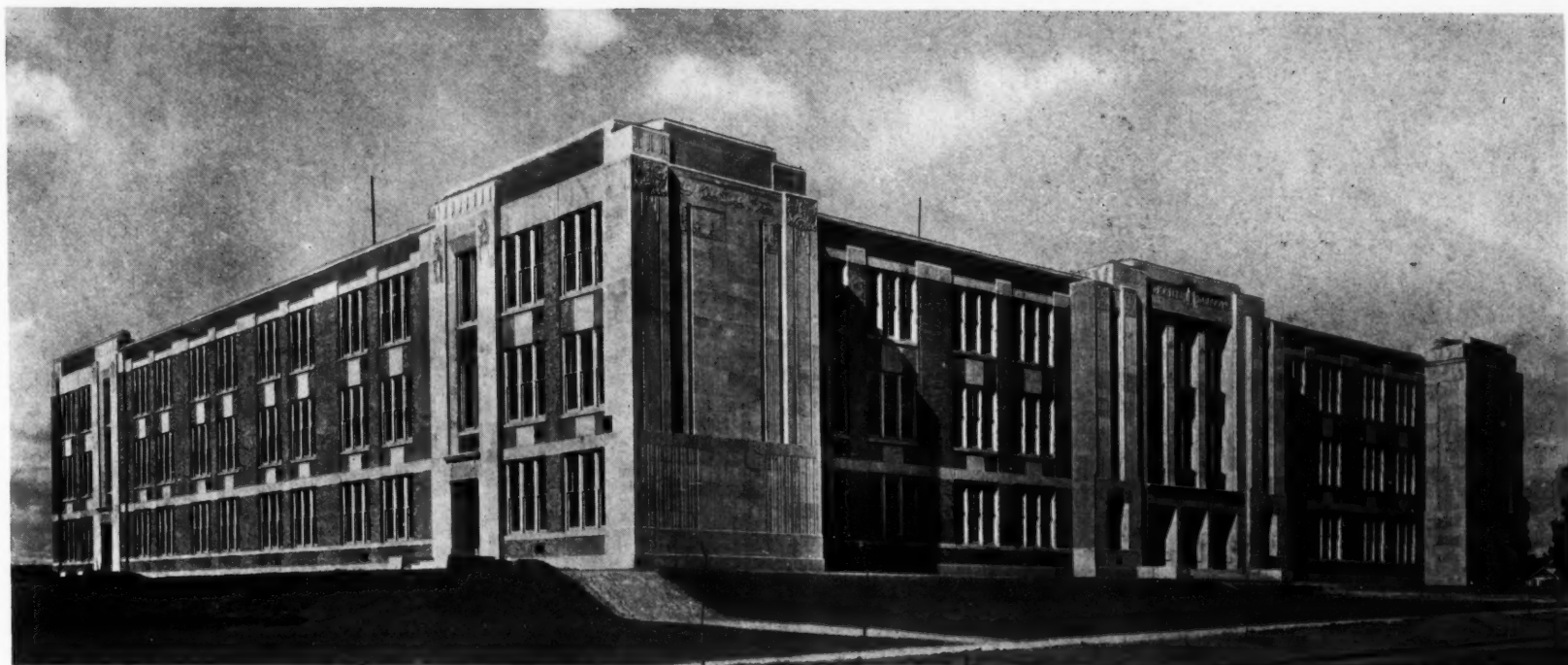
On the second floor there are eleven classrooms, four general-science rooms, a drafting room, a suite for elementary business instruction, and a teachers' retiring room. A large general library, with a special classroom adjoining, forms the center and heart of the academic instructional work. The library is fully equipped for its important service and is attractively but quietly finished.

The third floor contains eleven classrooms, a music room with a small stage and a music storeroom, two homemaking rooms, two domestic-science rooms finished with appropriate tile wainscoting, a model housekeeping suite, two drawing rooms with a storeroom between, two large general storerooms, and a janitor's room.

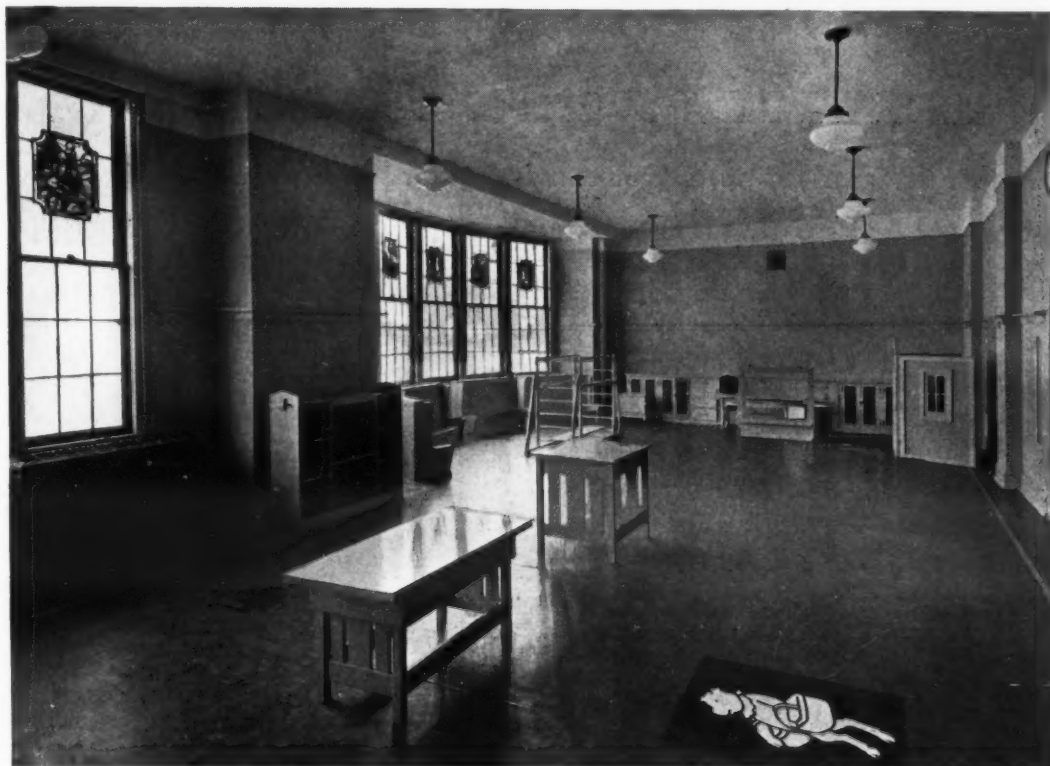
In accordance with the school-management practice of the Syracuse schools, the classrooms include approved ventilated wardrobes in the rear of all rooms. Adjoining are teachers' closets and bookcases. Blackboards of the swinging type, as well as stationary blackboards and cork bulletin boards, are standard equipment. The interior finish is of oak, with metal door bucks.

A complete radio installation is a part of the instructional equipment. Loud-speakers have been placed in all the classrooms and in the gymnasium and auditorium. Microphones are located in the principal's office and in the auditorium so that the entire school can be reached from either center.

The building is very simply finished and special treatment has been limited to the auditorium, the library, the music room, and the kindergarten. The auditorium is ornamented with a dignified modernistic motif. The ceiling



GRANT JUNIOR HIGH SCHOOL, SYRACUSE, NEW YORK
Randall and Vedder, Architects, Syracuse, New York.



KINDERGARTEN, GRANT JUNIOR HIGH SCHOOL, SYRACUSE, NEW YORK
Randall and Vedder, Architects, Syracuse, New York.

and side-wall panels which are a part of the decorative scheme, are fitted with acoustic plaster. The auditorium lighting, which is generally indirect, has given very satisfactory service.

The music room, which serves also for extra-curricular purposes, is finished with stucco cornices and pilasters and has a small, well-proportioned stage. The windows in the room are fitted with leaded-glass panels symbolizing music. The kindergarten room, which is finished in a quiet gray, has an attractive bay window, with modest leaded-glass panels in the windows symbolizing nursery rimes. The finish has also been used to complete the child-interest effect of the decorations.

The cost of the building and the contractors are as follows: General construction, \$473,735; heating, \$86,369; plumbing, \$41,131; electrical work, \$30,875; total cost, \$632,110. Equipment cost \$50,000. Cubic cost 25 cents per foot.

The building was designed and erected under the supervision of Messrs. Randall & Vedder, architects, who have done a great amount of schoolwork in Western New York.

SOLVES TOWN'S DEPRESSION RECREATION PROBLEM

Portland, Indiana, has solved the local depression recreation problem through the avenue of what is commonly called softball.

Twelve teams representing twelve industrial, business, and social organizations compose the softball league. Six of these teams are selected to represent what is locally called the American league, and six others represent the National league. Results of games are computed as are those in the regular baseball leagues. At the end of the season, a miniature world series is played.

Each team is composed of fifteen men most of whom are members or employees of the organization they represent. People other than members of the organization may be selected; however, they must be residents of the county. No new men may be substituted for the regular fifteen unless more than three of the original fifteen withdraw. Enough new men may then be selected to keep the number up to twelve. No person may be selected who has been suspended from another team. New members must also be approved by the board of commissioners.

The league is well organized. Each team selects its own manager. The twelve managers meet and select a board of three commissioners who look

after the care of the grounds, the selection of officials, and the settling of disputes.

During the summer of 1932, the games were played between the business and industrial closing hours and sunset. As the summer went on, and the days grew shorter, it became apparent that the games as organized could not all be played. Someone conceived the notion that a field could be lighted, and the games could be played after the evening meal.

A committee was appointed to see what could be done about lights. This committee first met with the city council. Many city employees were members of the softball teams, and several members of the council were ardent fans. The council was friendly toward the proposition and consented to install and maintain the lights and grade the field provided money could be raised to pay for the lighting equipment and to pay for the electric current.

The committee visited the business places of the town and also interested individuals. Over \$400 was contributed. The equipment was purchased through the city light department.

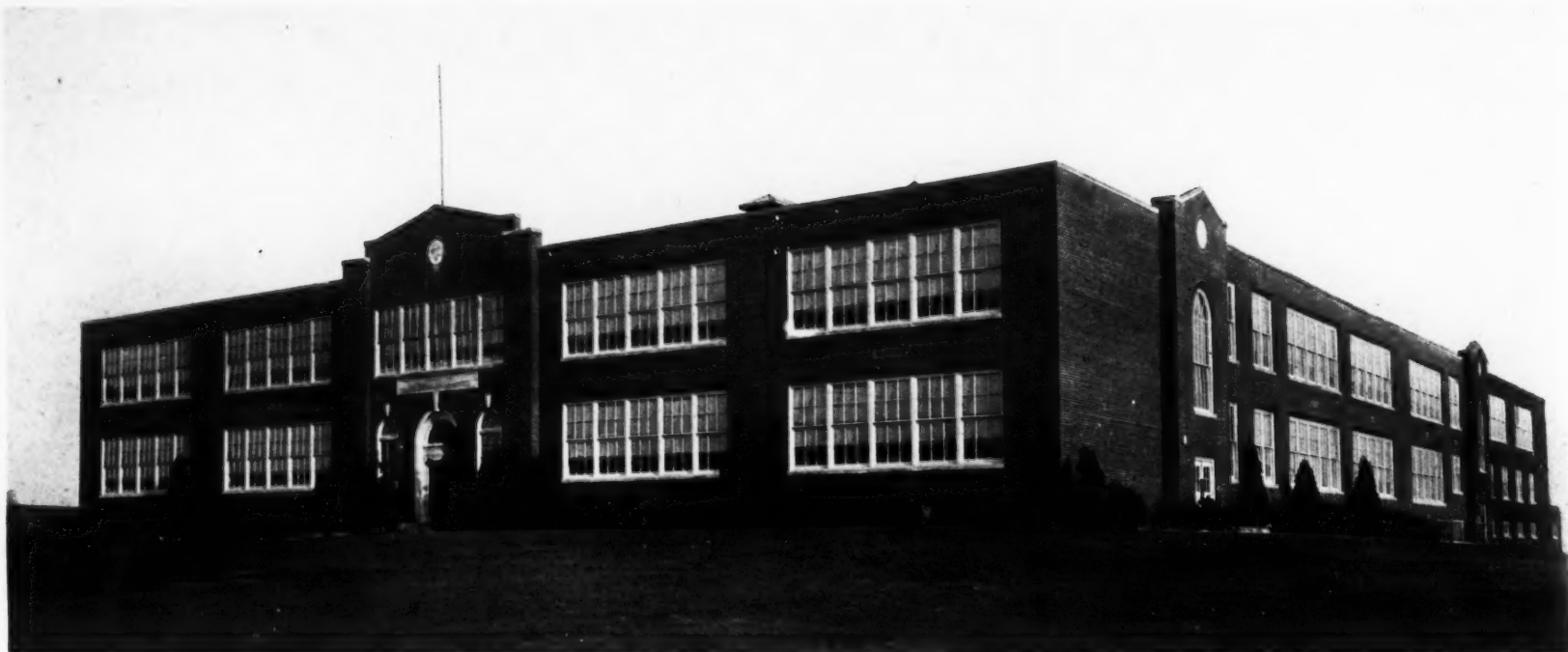
The next problem before the committee was to select a suitable field. The games had previously been played on the high-school athletic field. An agreement was soon reached with the school board whereby the lights might be installed on the high-school field provided they would be arranged so that football games could be played at night. A friendly written agreement was made between the school board and the softball organization concerning the management of games. It is so comprehensive that friction can hardly develop.

Money for electric current and for small maintenance charges is derived by charging a small fee of 5 cents per seat. The National Guard Armory lent bleachers to the softball league free of charge. Enough additional money has been derived from this source to build a small grandstand. Now the fee is charged only for seats in the grandstand, and the bleacher seats are free. As more money accumulates, more permanent seating facilities will be installed.

No person profits financially from the games. All persons work without pay except the umpires who receive 50 cents a night.

A loud-speaker is taken to the field, and a young law student furnishes the local color and humor. A public-spirited citizen especially interested in football had a fence built around the field. This not only keeps the spectators off the field but improves the appearance as well.

Since an estimated average of 800 enthusiastic people watch the softball games three nights a week, and since about 200 young men are provided with an opportunity to learn the lessons of good sportsmanship, Portland justly feels that she has solved the recreation problem of the depression and at very little expense. — D. S. Weller.



UNIONVILLE JOINT CONSOLIDATED SCHOOL, UNIONVILLE, PENNSYLVANIA
E. William Martin, Architect, Wilmington, Delaware.

Philanthropy Contributes to Citizenship

George R. Cressman, Ph.D., Assistant County Superintendent of Schools, West Chester, Pennsylvania

Throughout the nation there are many individuals of wealth who have contributed most generously toward the public welfare, but there are few communities indeed where those efforts have been so definitely directed toward setting up the possibilities for producing good citizenship as has been the case in Chester county, Pennsylvania.

The county with an area of 777 square miles, lying in the southeastern part of the commonwealth is 58.8 per cent rural in nature, dairying being the predominating branch of agriculture. In the extreme eastern end, however, it bears a very definite suburban relationship to the Philadelphia metropolitan area. These facts, coupled with the varied scenic and recreational facilities of the county, have tended to make it a desirable place for wealthy individuals from cities near by to establish summer homes and in some cases to take up productive agriculture as an avocation.

The elimination of antiquated and outworn school facilities has proceeded rapidly during the past decade or more, being stimulated by local initiative and through state and county agencies. As a result the number of one-teacher schools in Chester county has decreased from 209 in 1920 to 144 in 1930 and to 121 at the present writing, a decrease of 42.1 per cent. It is especially significant to note, however, that a very considerable part of the impetus toward the improvement of school opportunities by consolidation has come from the willingness to contribute generously of their means on the part of Mr. Pierre S. duPont, Chairman of the Board of the E. I. duPont de Nemours Company and member of the Board of the General Motors Corporation, and Mr. Frank B. Foster, formerly president of the Congoleum-Nairn Corporation.

Both these gentlemen are large landholders in the county and residents thereof for a large part of the year. They have taken an unusual personal interest in helping to provide for the boys and girls of the open country, educational facilities equal to or exceeding those provided in the larger cities of the nation. It is interesting to observe, however, that in no case have outright contributions been made for constructing new buildings, unless at that time or

previously a reasonable amount was raised by the area to be served. In this way local interest and local initiative have been kept alive.

It should be noted, however, that in Pennsylvania no local school district, i.e., township, borough, city or independent district, may raise funds amounting to more than 2 per cent of the assessed valuation of the taxable property in the district without a favorable vote of the people, nor more than 7 per cent of such valuation with the consent of the electorate. Very definite limitations are set, therefore, to the type of educational facilities which the districts are able to provide.

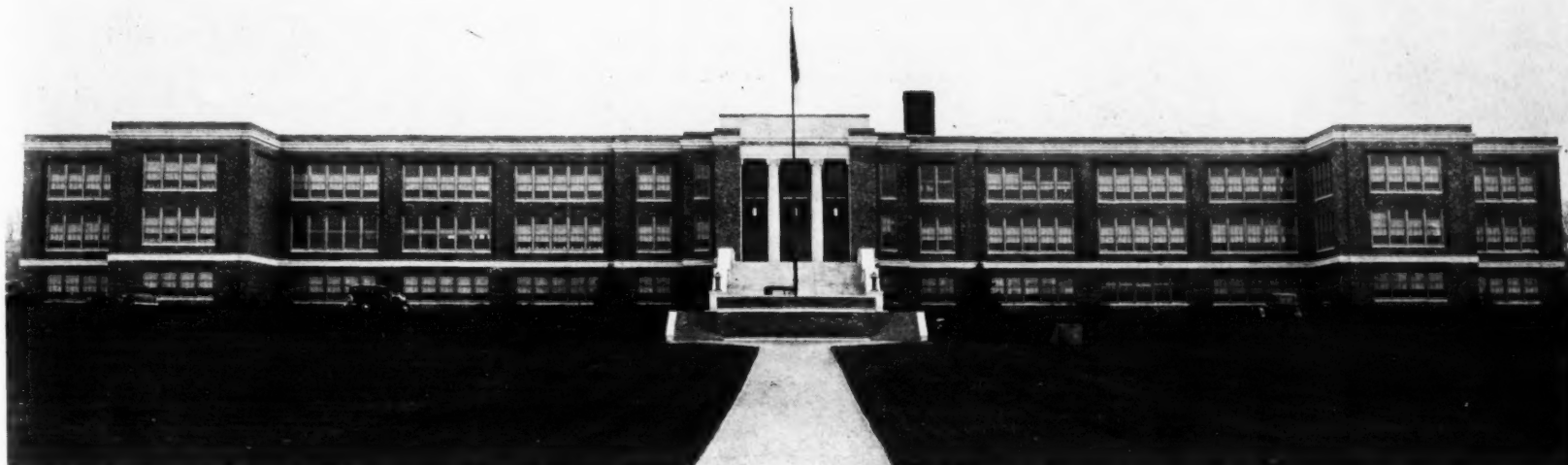
One partial solution to the problem just suggested has been to encourage the formation of "joint" schools or the combination of several districts into a special organization for school construction, operation, and maintenance. For general fiscal purposes, such as taxation assessment, etc., local district boundaries are maintained. In this case a "joint" school board is formed, but the individual or district boards of school directors also continue to function. Provision is made in the school code, however, for the formation of a "union" district or single district for all school purposes (fiscal as well as administrative). The procedure for the formation of this type of district has been so

difficult and the financial support by the state so restricted that but two such organizations have been formed in the commonwealth to date.

The earliest project in the county, representing the cooperative efforts of four districts (East Marlboro, West Marlboro, Newlin, and Pocopson), was that of the "joint" consolidated school at Unionville, completed in 1922 as a result of a bond issue of \$175,000. The school was built to accommodate five hundred children in grades 1 to 12 and resulted in the closing of 19 one-teacher schools and 1 four-room building. Very soon, however, the enrollment outgrew the school, and the four districts found themselves lacking the ability to borrow the necessary funds for enlargement. It was then that Mr. duPont came to the assistance of the community and built, entirely from his own funds, an addition to the building of twelve classrooms and gymnasium. He completely remodeled the heating system in the original building, installed efficient oil burners and a new water system, and redecorated the interior. In addition he caused to be constructed a separate bus garage and shop building, set up a gas-generating plant for laboratory use, gave two large new busses, and built approximately ten miles of macadam roads over which the



AVON-GROVE JUNIOR-SENIOR HIGH SCHOOL, CHESTER COUNTY, PENNSYLVANIA
E. William Martin, Architect, Wilmington, Delaware.



KENNETT CONSOLIDATED SCHOOL, KENNETT SQUARE, PENNSYLVANIA
E. William Martin, Architect, Wilmington, Delaware.

school transportation vehicles travel. In many cases also he caused visibility to be improved on roads over which the busses traveled, thus increasing the safety of the children transported.

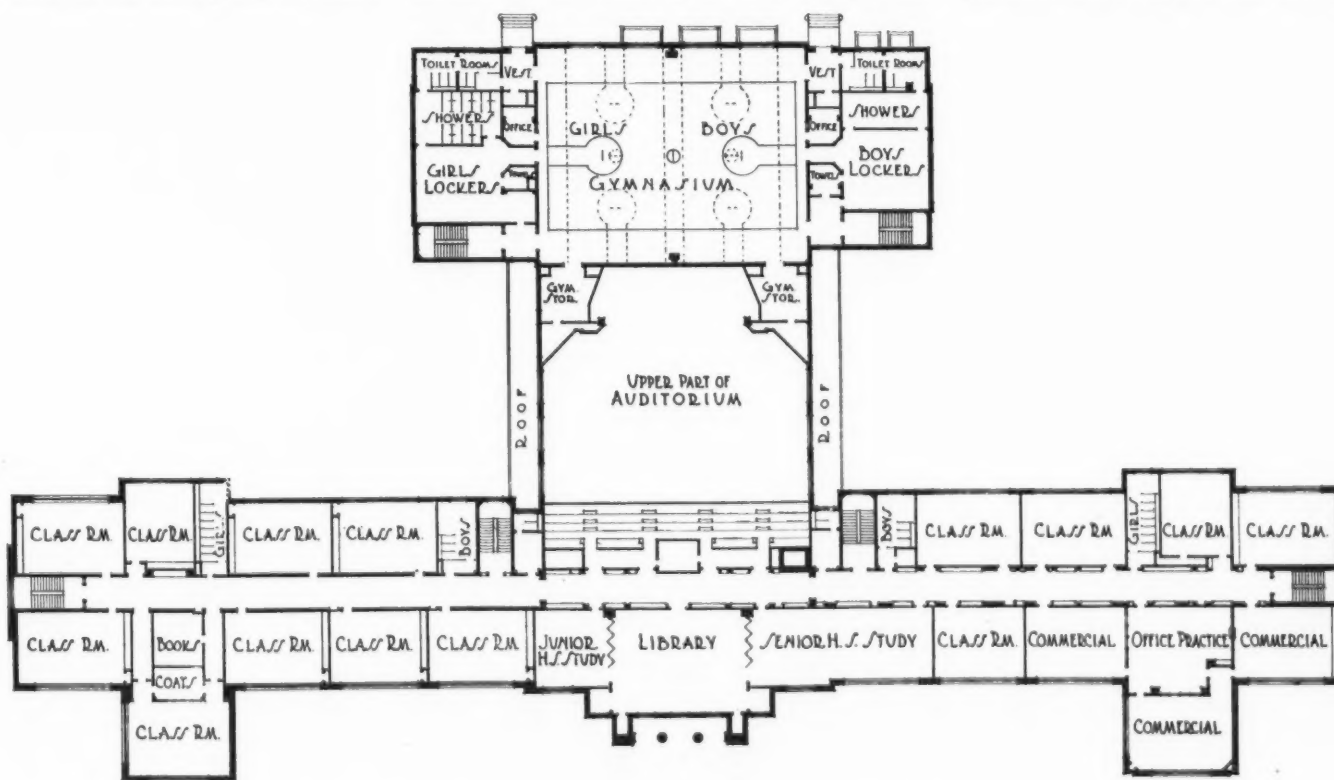
The second "joint" project was that formed by three districts covering the general area of the Brandywine battlefield and beyond. The building itself stands on a splendid piece of ground 10 acres in area. Two townships (Birmingham and Pennsbury) in Chester county and one (Birmingham) in Delaware county made up the group, representing one of the very few school-consolidation projects in the state where county lines are crossed. Here Mr. duPont contributed \$50,000 toward the construction of the building, while the three districts authorized a bond issue of \$42,000. Interested citizens of the community donated ten acres of ground. The building contains ten classrooms, a shop, a combined auditorium and gymnasium, and other minor units. It houses grades 1 to 10, inclusive.

Standing on high elevation, seven acres in area, midway between the boroughs of Avondale

and West Grove and bearing a part of the name of each, is the Avon-Grove Junior-Senior High School, again made possible largely by the generosity of Mr. duPont. The boroughs mentioned and one township (London Grove) make up the group responsible for the building and supporting the school. To this organization Mr. duPont contributed \$150,000, and the three districts floated bond issues totaling \$105,000. The building is of a beautiful buff-brick construction and contains 16 classrooms, an auditorium, a gymnasium, and miscellaneous units. It was completed in 1929 and now has an enrollment of 365 pupils in grades 7 to 12.

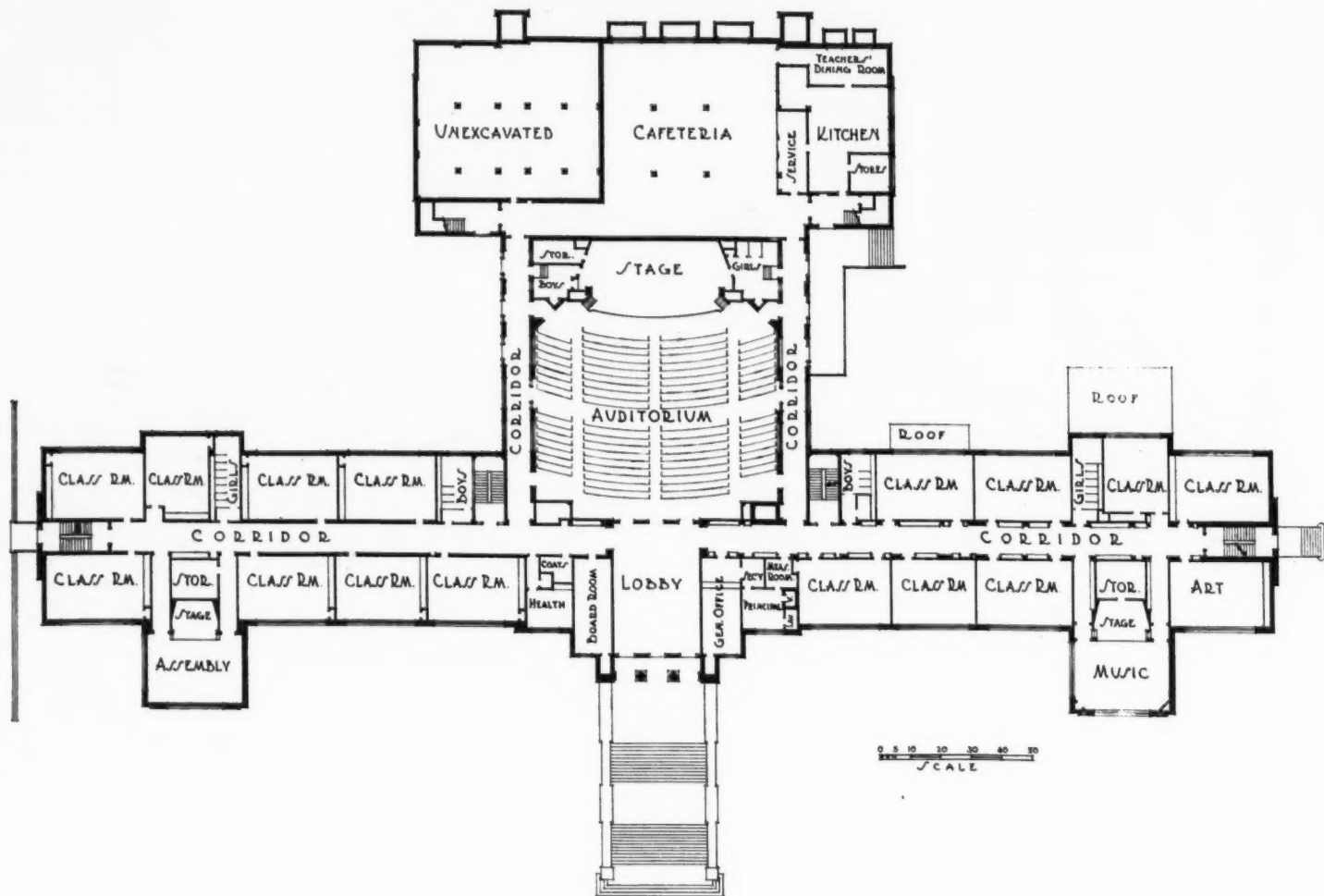
What has been described as the "largest and finest consolidated school" in America is represented by the new school at Kennett Square, occupied early in 1932. This building is the crowning educational monument to the generosity of Mr. duPont who contributed approximately \$900,000 toward its construction and equipment. Four districts, Kennett Square borough, Kennett and New Garden townships and Independent No. 1 district supplied the balance of the funds by floating a total bond

issue of \$350,000. It is impossible to describe in a brief space the details of this unusual consolidated school which stands on an eminence of 14 acres at the end of one of the main streets of the borough of Kennett Square, the home of the Quaker poet and author, Bayard Taylor. The school building contains a total of 133 rooms of all types, 50 of which are regular classrooms. The building covers a ground area of an acre and a quarter and has a floor area of 110,000 square feet. It is designed to accommodate 1,600 pupils from grades 1 to 12. The present enrollment is approximately 1,450. It is complete in its equipment for vocational work for both boys and girls, science laboratories, a conservatory, separate gymnasiums for both sexes, and a large cafeteria. A centrally controlled radio and amplifying system operates loud-speakers in each of the classrooms. Transportation is carried on with eight large busses, which are stored in a garage erected on the school property. As at Unionville, to facilitate this transportation Mr. duPont had constructed at his



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SCALE

SECOND FLOOR PLAN, KENNETT CONSOLIDATED SCHOOL, KENNETT SQUARE, PENNSYLVANIA
E. William Martin, Architect, Wilmington, Delaware.



FIRST FLOOR PLAN, KENNETT CONSOLIDATED SCHOOL, KENNETT SQUARE, PENNSYLVANIA
E. William Martin, Architect, Wilmington, Delaware.

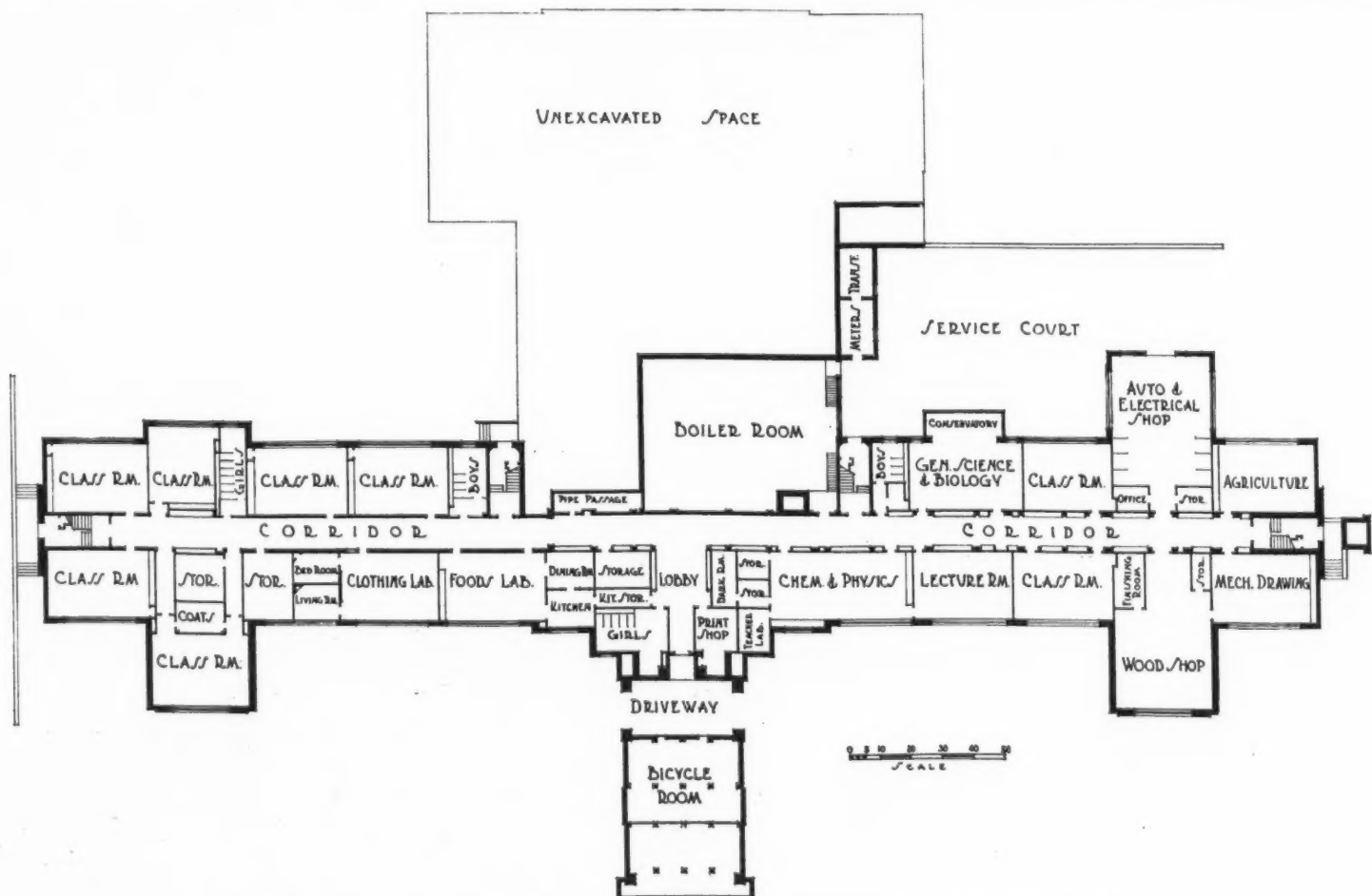
own expense a number of miles of macadam road.

In the northern section of the county effort has been more largely extended toward establishing small, complete elementary-school units, locally within the districts. In four of these projects Mr. Frank B. Foster took an unusual interest and gave much of his time and resources for the improvement of the educational facilities of the county.

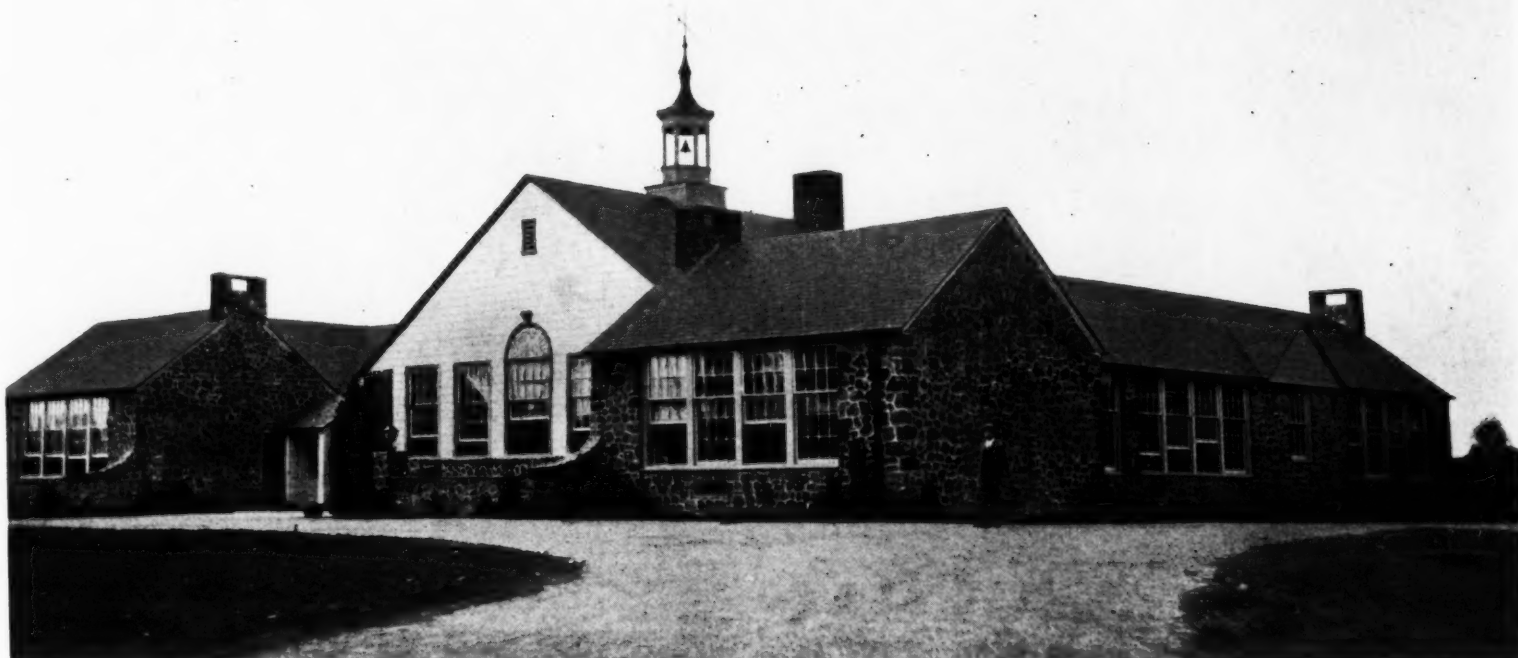
In 1925 the Charlestown consolidated school was constructed, Mr. Foster contributing \$25,000 and the district \$13,000. The new building consisted of four classrooms and a basement, with several utility rooms. Very soon more space was required and Mr. Foster had constructed at his own expense a handsome addition of an auditorium, a gymnasium, and an additional classroom. The cost of the addition was \$26,000, plus considerable interior

equipment and landscaping.

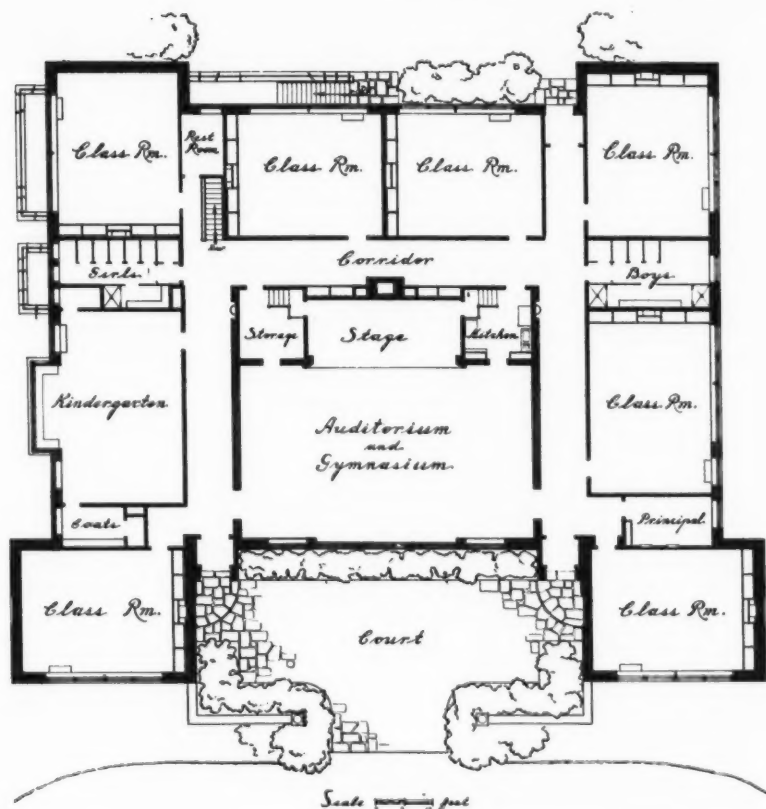
The consolidated school in East Pikeland township, opened October 15, 1928, represents one of the most complete and forward-looking schools in the county and state. As thoroughly equipped as many schools of ten times its size, it was made possible by a gift from Mr. Foster of \$47,800, a bond issue of \$25,000 by the district, and additional contributions of \$4,082.17 for equipment, library books, shrubbery,



GROUND FLOOR PLAN, KENNETT CONSOLIDATED SCHOOL, KENNETT SQUARE, PENNSYLVANIA
E. William Martin, Architect, Wilmington, Delaware.



SCHUYLKILL TOWNSHIP CONSOLIDATED SCHOOL, CHESTER COUNTY, PENNSYLVANIA
Davis, Dunlap and Barney, Architects, Philadelphia, Pennsylvania.



FLOOR PLAN, SCHUYLKILL TOWNSHIP CONSOLIDATED SCHOOL,
CHESTER COUNTY, PENNSYLVANIA
Davis, Dunlap and Barney, Architects, Philadelphia, Pennsylvania.

etc., from ten interested citizens and again from Mr. and Mrs. Foster. There are six classrooms, a Boy Scouts room, an auditorium, and a gymnasium. The school ground covers seven acres and is well laid out in play fields and equipped with playground apparatus. As an example of the complete utilization of building, equipment, and personnel for the development of worth-while citizenship this school represents a prophecy for the future.

The most recent development in the elementary field in the county is that of the consolidated school in Schuylkill township. Here again Mr. Foster contributed \$17,500, and the township utilized the proceeds of a bond issue of \$47,000. The same gentleman assisted in the further purchase of a piano, a radio, and playground equipment. Twenty-eight other residents of the community contributed \$10,860. The school is an architectural gem, built of native stone, in the colonial style. There are

eight classrooms, a combined auditorium and gymnasium, a medical room, a principal's room, a kitchenette, and a Boy Scouts room. The school offers a complete program from grades 1 to 8. The present enrollment is 265.

While these projects do not, of course, show the total trend toward the consolidation of schools in Chester county, they do represent a most important part of the movement. A large number of other districts have carried through the construction of new buildings without any philanthropic assistance whatever. However, the stimulation of the contributions just described has been well-nigh unmeasurable. In the development of the programs outlined there were closed a total of exactly 50 old one-room schools, 11 two-room buildings, and 4 rather large buildings of more than two rooms.

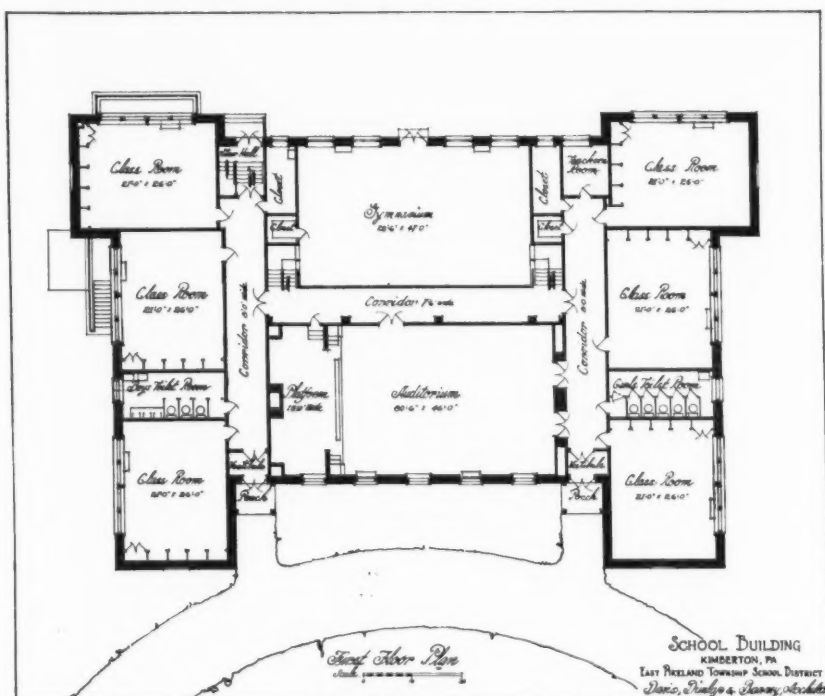
It should be said that in this entire building program the contributions have been made without any "strings" whatever. The only exception has been that in each case both Mr. Foster and Mr. duPont have selected architects of their own preference, firms of distinction and experience in every case. In the buildings to which Mr. Foster has contributed, with the exception of the original part of the Charlestown building, the architects have been Messrs. Davis, Dunlap and Barney, of Philadelphia, Messrs. Ritter and Shay, of Philadelphia, were the designers of the Chadds Ford building and the original structure at Unionville, while Mr.



CHARLESTOWN CONSOLIDATED SCHOOL, CHESTER COUNTY, PENNSYLVANIA



EAST PIKELAND CONSOLIDATED SCHOOL, KIMBERTON, PENNSYLVANIA
Davis, Dunlap and Barney, Architects, Philadelphia, Pennsylvania.



EAST PIKELAND CONSOLIDATED SCHOOL, KIMBERTON, PENNSYLVANIA
Davis, Dunlap and Barney, Architects, Philadelphia, Pennsylvania.



CHADDS FORD CONSOLIDATED SCHOOL, CHESTER COUNTY, PENNSYLVANIA
Ritter & Shay, Architects, Philadelphia, Pennsylvania.

E. William Martin, of Wilmington, planned the addition at Unionville, and the buildings at Avon-Grove and Kennett Square.

None of these schools has become in any real sense a burden upon the community for maintenance because outside of the slight additional taxation necessary to retire the bonded indebtedness the new organizations are usually less costly to maintain than the old inefficient schools. The interest and extremely generous financial assistance of these two gentlemen and others in certain of the communities have made possible the setting up of institutions that are rich in potentialities for the citizenship of the future.

HOW CLEAN LIGHTING FIXTURES KEEP DOWN HIGH MAINTENANCE COSTS

The maintenance of lighting, which consists largely of keeping the globes clean, is often neglected, except in some factories and public buildings where the size of the installation is so extensive that every detail of efficient operation is taken into consideration. This statement was recently made by Mr. Samuel G. Hibben, of the Westinghouse Lamp Company, East Pittsburgh, speaking on "The High Cost of Neglected Maintenance" at a conference on Economics of Applied Lighting.

Mr. Hibben, in his talk, pointed out that dirty lighting fixtures add \$30,000,000 to the annual lighting costs, due to inadequate and lack of intelligent maintenance. He maintained that the general public is unaware of the correct way to get the most light for the money spent on electricity, adding that "water is cheaper than watts." Lighting fixtures which are not properly cleaned, said Mr. Hibben, frequently have an accumulation of dirt and dust which operates to cut down the amount of light obtained from the lamp, and in some instances makes it appear that a brighter lamp is needed. The application of a little soap and water, or the mere dusting of the globe, would restore the original efficiency of the lighting fixture and lamp, and would aid in getting the most light for the money spent on electricity.

Concluding, Mr. Hibben explained that if all lighting installations and their immediate surroundings were cleaned and reconditioned immediately, the illumination that the nation enjoys would be about doubled. It is the loss through the neglect of lighting installation which contribute to the high cost of low maintenance, said Mr. Hibben. Guarding against such insidious losses resulting from such items as low voltage improper or aged lamps, dusty reflectors, dirty walls, and dirty ceiling surfaces, empty sockets, which constitute poor housekeeping, is the way to get the most for the money in artificial lighting.

SCHOOL-BUILDING CONSTRUCTION

A total of 221 school-building projects were undertaken during the month of August, 1933, in states east of the Rocky Mountains. The contracts amounted to \$2,635,100.

Why Expensive Transportation of School Children in Privately Owned Busses?

J. D. Carson, Superintendent of Schools, New Dover, Ohio

Conflicting ideas and opinions on the cost and efficiency of the school-owned busses are quite common. Some people contend that they are very costly because of the careless treatment of the busses; others maintain that they furnish economical transportation in a most efficient manner. A saving of only 1 per cent in the cost of transportation would mean \$50,000 a year on Ohio's five-million-dollar transportation bill. The writer, in order to determine if such a saving were possible, made a survey of eight Ohio counties to see if one plan of ownership is furnishing cheaper transportation than the other. The findings of that survey show that not only 1 per cent but 10, 15, or 20 per cent might be saved in many cases.

Accurate data on the cost of transportation could be secured only from the records of the clerks of boards of education of the several school districts. The cooperation of these clerks and of their county superintendents made possible the collection of this information.

Eight counties in Ohio, ranging from Butler in the southwest and Belmont on the Ohio River to Ottawa and Ashtabula on Lake Erie, were included in the study. Five of these counties are using both plans of ownership; one uses all district-owned busses; and the other two contract for all their transportation service. The county superintendents of six of the counties sent out financial-statement blanks on transportation to their clerks. Some of the blanks were not returned, consequently the figures are not complete for some of the counties. The county superintendents were studying transportation from another angle in Butler and Delaware counties, respectively, and they gladly furnished material for their two counties.

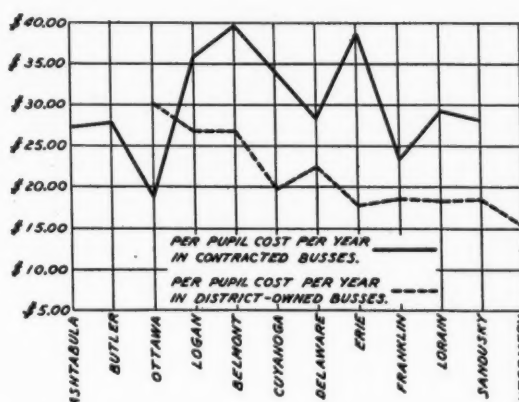
Another type of information was secured from the superintendents or principals of a few schools that practice both methods within their own districts. These men were asked questions on both cost and general efficiency and their answers were enlightening.

Determining Cost for District-Owned Busses

A uniform method of determining the cost for district-owned busses was followed throughout. Fifteen per cent of the original cost of the bus was added in each year for depreciation. This seems a fair figure, for it is based on the average life of a bus as seven years. Two per cent, or one half of the original cost, was added for interest on the investment. Two per cent was used because that is the rate most of the districts would receive on deposits at the bank. Interest was determined on one half the original cost because it would be a fair average over a period of years, making allowance for busses that were half worn out and which had depreciated half. Older busses would average up with newer busses to reach that same figure. All other possible items, repair, drivers' salary, insurance, gas, oil, etc., were included.

The figures for Belmont, Franklin, Delaware, and Sandusky counties all show a marked difference in cost of the two plans of ownership. All show that the district-owned busses are operating at a much lower cost than the contracted busses, ranging from 20.6 per cent lower in Delaware county, to 35.1 per cent in Sandusky county.

A comparison between Montgomery county, where all busses are owned by the schools, and Butler and Ashtabula counties, where they are all contracted shows a still greater variation. The per-pupil cost was \$15.50 in Montgomery as compared with \$27.87 and \$27.10, respectively, for the other two counties. The county auditors' reports for 1930-31 showed that Montgomery county was enjoying the cheapest transportation in the state. That year the county transported 4,521 pupils, at an average cost of \$13.64 per pupil. The average for the entire state was \$27.82. Reports from the clerks of the county showing that busses had run eight and ten years and were still in operation, exploded the argument that the school-owned busses are abused and worn out prematurely. These reports also substantiated the fact that seven years is not an unreasonable expectation for a modern bus.



COSTS OF SCHOOL-BUS TRANSPORTATION IN OHIO COUNTIES

Ottawa was the only county that did not tell the same story. In this county 22 school-owned busses transported 889 pupils, at a per-pupil cost of \$30.16, while 646 were transported in contracted busses for \$18.64 per pupil. Large repair bills on old busses that had apparently outlived their usefulness and should be replaced, and higher salaries to drivers were responsible for a large part of this difference. Two districts which contracted for busses received cheap transportation at the cost of efficiency by using the multiple-trip plan. One district transported 275 pupils in only two busses. This helped to bring down the average cost per pupil in the contracted busses.

These eight counties transported 5,769 pupils in district-owned busses, at an average cost of \$19.88 per pupil, and 15,168 pupils in contracted busses for \$27.30 per pupil. The difference was \$7.42 per pupil. If the eight counties had used publicly owned busses throughout and had saved \$7.42 on each one of the 15,168 pupils that rode in contracted busses, they would have saved \$112,546.56 in that one year. Over a period of seven years (the length of life of a fleet of busses) that saving would grow to over three quarters of a million dollars. Similar savings all over the state would soon mean millions to the taxpayers.

The county auditors' reports to the state for the school year 1930-31 showed that the per-pupil costs of transportation ranged from \$13.64 in Montgomery county to \$73.94 in Jefferson county. The reports did not show how many busses were owned by the districts, but they did show how much was spent in each county on bus repair. The fourteen counties which did not spend a cent for repair evidently depended entirely on contracts. They transported 16,194 pupils, at an average cost of \$38.25. Fifteen counties spent over \$2,000 each for repair and consequently owned several busses. They carried 45,208 pupils, at a cost of \$20.86, a little over half of the cost in the other counties. We are not to assume, however, that all of that difference

County	Number of Pupils Transported		Per-Pupil Cost Per Year	
	Contract Busses	District-owned Busses	Contract Busses	District-owned Busses
Ashtabula	4,405	00	\$27.10	
Belmont	912	191	39.62	\$26.83
Butler	3,786	00	27.87	
Delaware	2,304	312	28.33	22.49
Franklin	2,556	1,385	23.45	18.24
Montgomery	00	1,599		15.50
Ottawa	646	889	18.64	30.16
Sandusky	559	1,393	28.41	18.42
Total	15,168	5,769	\$27.30	\$19.88

County	Number of Pupils Transported	Per-Pupil Cost Per Year
Cuyahoga	608	\$34.40
Erie	1,174	38.81
Logan	2,100	35.55
Lorain	882	29.17
Crawford	868	0336*
Total	5,632	4.518
Total for both groups	20,800	10,287
Total per-pupil mile per day		\$29.15*

*Averages do not include Crawford county.

in cost was due to ownership because other features enter in, for the condition of the roads, the topography, and the density of population vary greatly when the state as a whole is taken into consideration.

No one would be in a better position to know the merits of the two plans of ownership than the superintendents of districts, which employed both plans side by side. The superintendents of sixteen such districts reported on various phases of transportation for 1931-32. Some of these did not have figures for costs, because their records and systems of cost accounting were inadequate. A total of 1,251 pupils were reported riding in contracted busses, and 1,390 were reported for busses owned by these districts. The per-pupil costs were \$24.43 and \$15.60. Only one district, which gave figures for both types of ownership, showed a difference in favor of the contracted busses, and that superintendent favored district ownership because it gave more efficient service.

District-Owned Busses Most Efficient

These reports made two other distinct contributions. First, that the district-owned busses are just as efficient or more so than the others, and the busses are in as good or better shape than those owned by private individuals. The fact must not be overlooked that they are not only more efficient, but are furnishing transportation at about two thirds of the cost to the district. The other point brought out by the reports is that the schools need better systems of cost accounting for transportation. Most of the schools knew little about the cost of their transportation and they had no way of checking on each bus, or on any special feature. Other districts, however, know exactly where they stand. One clerk in Montgomery county reported the quarts of oil used, the hours of garage labor, the number of gallons of gasoline, etc. It would be well for every school to establish a definite system of cost accounting that would account for each individual bus.

Profits Cause of Difference in Costs

Theoretically, profits would be the cause of part of the difference between the costs of the two plans. But, the question arises, "How much are they responsible for, if any?" The study made by Mr. Augsperger in Butler county gives some idea of what this profit might be. He began his study in September, 1931, by having owners and drivers of 25 busses keep an accurate itemized account of all costs for the year. After all costs were deducted, including 5 per cent interest on the investment and one sixth of the original cost of the busses for depreciation, the average amount left to each driver was \$513.25. The 122 drivers of district-owned busses included in the study received an annual salary of \$410.78. The difference between these two figures, or \$102.47, would be the amount left to profit. In this case the school districts were paying about three dollars per pupil to profits. If depreciation had been figured at one seventh instead of one sixth, there would have been \$25 to \$35 more left to profit.

Prosperous times would cause the amount chargeable to profits to increase, and an economic depression would cause it to be smaller. This is simply the working out of an economic law. During depression a man would be willing to forego profits if he could secure a job that pays him even poor wages. This law has been operating during the past few years. The difference in cost between the two plans has been gradually decreasing. Studies made in Cuyahoga, Erie, Logan, Lorain, and Crawford counties in the period 1925 to 1931, showed a wider difference than was found in the survey of 1931-32. Those studies showed that the privately owned busses cost \$35.50 per pupil, and the district-owned busses \$19.60. Compare these figures with the corresponding ones for 1931-32, namely, \$27.30 and \$19.88, and we see that the cost for district-owned busses remained practically the same, while the cost for privately owned busses dropped off over eight dollars. Figures for 1932-33 and the outlook for 1933-34 showed that the two costs will approach each other still closer.

Montgomery county employs many high-school boys as drivers. This helps to lower the cost of transportation a great deal. The 42 drivers from that county, included in the survey, received an average salary of \$288.61, as compared with \$410.78 for the entire group. The argument comes up that student drivers are not capable. Montgomery county has been well satisfied with them. An interesting

(Continued on Page 44)

THE AMERICAN School Board Journal

EDITORS:



WM. GEO. BRUCE

WM. C. BRUCE

Problem of Financing Public Education

THE financial problem, which, at present, concerns many school units throughout the United States has had the thoughtful consideration of the nation's leading educators. At a recent conference, held under the auspices of the National Education Association, the case was clearly set forth and the solution to the problem comprehensively discussed.

In contemplating the present status it may be well to touch upon the causes which have led to distress, but it becomes apparent to every student of the subject that the effort of the hour must be in the direction of the corrective steps that may lead to the solution.

The conference in question found its best expression in a symposium of subjects covering every phase of the present school situation. Nearly all of the papers submitted aimed either in part, or as a whole, to obviate in the future the difficulties and obstacles of the present or past.

While there is much to be accomplished in adjusting the administrative structure, build an effective organization, and adjust the same in the light of the present economic situation, equal attention must be given to the means and the sources that make for school support. The essence of the solution must, after all, be found in the field of taxation.

And here the conference comes forward with some pertinent recommendations. These aim to develop a balanced system of taxation whereby there is a more equitable spread of the tax load. Here also is implied the fact that an undue dependence upon the outworn instrument known as the property tax should and must eventually be discontinued. This logically leads to the income-tax system.

Here, someone may argue that the variations caused by fat and lean years will also result in variations in income. A reduced income will be followed by a reduced tax yield. All this is true. But, where property has lost its ability to make an earning, delinquency will follow. The country throughout is at present afflicted with delinquent taxpayers, while the nonproperty owner, who enjoyed an income, be it large or small, escaped taxation entirely. On this point the report, issued by the conference, says:

"Schoolmen as intellectual leaders in their communities and as good citizens should be interested in securing the best possible distribution of the total tax burden, in a word, in sound tax reform. But over and above this interest they should be concerned because the schools themselves inevitably suffer as a result of any inequities in the tax set-up. The tax burden on individual taxpayers may be excessive, although the portion of the social income devoted to government is not unduly great, or is indeed too small. Where such a situation exists, all governmental activities, and particularly local activities, including education, will be unduly and unnecessarily hampered, not because the communities concerned are unable to afford their support, but because the method of that support places an unreasonable and perhaps an unbearable burden upon particular elements in those communities."

The position here taken is one which we have urged for the past two decades. It simply means that any reform of public service that shall be dependable and insure stability for the support of the public schools must begin with reforms in taxation.

The report made by the conference infers in its preface that there has been a gradual breaking down in this country in the direction of the support granted to the schools, and points to Chicago in substantiation of that claim.

We cannot subscribe to that viewpoint. The case of Chicago is

singular and exceptional and is not, in any degree, indicative of the situation throughout the country as a whole. The truth is, that while the system of taxation as applied to the several states and the integral tax units therein are subject to defects and shortcomings, the schools as a whole have in normal times fared well in the way of financial support. The fact that an abnormal situation has arisen has simply brought into more glaring view the taxation defects which afflict us. These must receive the attention of the American people in the lawmaking of the future. The cause of popular education is vitally concerned.

The Election of School-Board Presidents

THE presidency of a board of education carries with it exceptional prestige and honor. There is no official position in the community which is endowed with a more sacred responsibility than that which falls upon the shoulders of the legal head of a school system.

While such leadership is clothed with great honor, it is also frequently burdened with exacting responsibilities and many annoyances. It is perhaps because of the latter fact that there are no spirited scrambles for the presidency. Seniority, prestige, or exceptional committee service usually determine the choice.

The procedure of choosing a school-board president is usually by open roll call, although there are instances where the secret ballot obtains. The State of Wisconsin last spring enacted a law whereby secret balloting for the school-board presidency is forbidden.

It was discovered that the secret ballot led to unethical methods in reaching a choice. When an undeserving or unworthy member was suddenly elevated into the president's chair, it was difficult to ascertain who was responsible for the result.

The open roll call, whereby every member is placed on record as to his or her choice for the presidency, is the one and only method whereby the honor is most likely to be conferred where it belongs. A secret ballot does not fix responsibility, but on the contrary avoids it.

There are those in every board of education who are exceptionally well equipped to preside at meetings and demonstrate leadership. There are those who do not seek distinction, and finally those who are climbers whose capabilities or services do not entitle them to preferment. The judicious board member knows where honors are deserved, and where to place them in the interest of efficient school administration.

Schoolhouse Construction and the National Recovery Act

IT IS well for the school authorities throughout the United States to know that the National Recovery Act contemplates aid wherever enlarged schoolhouse facilities are needed. The sum of \$3,300,000,000 will go to the several states for capital investment involving construction projects and the employment of labor.

While in some sections construction projects dealing with sewage, waterworks, and highways are urged, in others the construction of school buildings is pressed with equal justification. In fact, the construction of school buildings comes clearly within the purview of the federal act. It remains, however, for school authorities, where schoolhousing has become a pressing need, to familiarize themselves with the federal act as to the legal, physical, and financial requirements involved.

Under legal requirement is meant that official action which authorizes the project under ordinary circumstances. This may mean agreement by the board of education, city council, village, or county board. In other words, a legally constituted body must propose the project in a manner prescribed by law.

The physical requirements embody the architectural and engineering considerations. In order to present a case to the state boards of public works the petitioner must come forward with plans and specifications covering the project in hand.

The third requirement relates to the financial considerations involved. There must be an estimate of cost, and the assurance that

the unit of government seeking aid is able to provide bonds covering the project. Here it should be remembered that while the national government makes an outright gift of 30 per cent, the other 70 per cent must be secured by a bond issue. The ability to pay the interest charges and redeem the bonds when due must be demonstrated.

It so happens that a community may have exhausted its bonding power, in other words, has reached the bond limit. Where the shrinkage of property values has been considerable, it may happen that a regular bond issue cannot be engaged in. In that case, a mortgage bond covering the project only may be undertaken. In either event, however, the ability to meet the obligation when due must be demonstrated.

One of the main considerations to be borne in mind is that the expediency, necessity, or urgency of the project in hand must be adequately set forth. The construction of a schoolhouse involves the employment of labor. This factor is important and will receive special consideration in localities where unemployment is most prevalent. At the same time the expediency of the project will become the controlling consideration.

School authorities desirous of availing themselves of the National Recovery Act should communicate with the state public-works officials for information. Printed bulletins, giving complete directions as to procedure, may be obtained. Be sure to call for Federal Emergency Administration of Public Works, Circular No. 2. This document provides complete instructions required in making applications for loans to states, counties, municipalities, and other public bodies.

Status of Schoolhouse Architects

THERE has been much uncertainty as to the status of the architectural service, under the National Recovery Act. The question proposed has been whether the architect does or does not come under the federal code. Or, in other words, whether the architect employed on a public-works project must be a local man, or whether an outside architect may be employed. As far as those in the immediate employ of an architect's office are concerned, the assumption must be that they come under the code.¹

The clause in the act which provides for the employment of local labor does not contemplate the architectural or engineering service involved in public-works projects. Many of the projects approved by state boards of public works, and recognized by the authorities at Washington, are in the hands of architects, other than local.

The explanation here is self-evident. There are communities in which a schoolhouse is being erected, which have no architects. Again, there are communities where the local architects, if any, have had no experience in the planning and construction of school buildings. They may be well equipped to plan a store building, a residence, or factory plant. But, when it comes to the building of a schoolhouse they may lack the necessary experience.

The fundamental fact to be remembered here is that all state, county, municipal, or village projects are left under the primary control of the authorities in charge of these units of government. They employ their architects, engineers, and other services just as they would under all ordinary conditions.

The Federal Government is merely concerned in the fact that the projects are efficiently and honestly performed, and that the legal and financial considerations are complied with. This means that the Federal Government must have the assurance that the money advanced can and will be repaid. This brings into play the economic vitality of the locality and its current and future tax ability, and the legal formalities exacted.

Another thought, which is pertinent here, concerns the fact that school architecture has become a highly specialized service. The modern board of education no longer peddles its schoolhouse projects as a favor to somebody. It has, moreover, become the fixed policy to seek expert service in the planning, as well as the construction

of a schoolhouse that shall be absolutely utilitarian, and shall embody all the economies involved in such a structure.

The problem resolves itself to one of expediency and common sense. We assume, and reasonably so, that the Federal Government does not aim to enforce rules and regulations which belong entirely within the control of the local factors. The primary purpose is to set the wheels of industry and commerce into motion, by releasing capital, providing labor, and meeting pressing needs in the field of public works. That is the logic of the situation.

Scope and Function of Parent-Teacher Associations

SINCE the advent of the parent-teacher associations in the United States, their utility has been under scrutiny and their expediency under observation. This scrutiny and observation applies to certain sections of the country only. In the main, the movement has found acceptance and the parent-teacher association has a distinctive achievement to its credit.

Wherever rupture arises between the parent-teacher organization on the one hand, and the school authorities on the other, it develops that the former has gone beyond its ordained province and has delved into things that are entirely within the function and authority of the school executives. The true mission and purpose of the parent-teacher association is to establish a coöperative contact between the home and the school in the interest and for the benefit of the child. The association may go one step farther, in that it manifests a helpful attitude to the school as a whole.

There are many school superintendents throughout the United States who welcome the services which a parent-teacher association can render to the school. There are many more superintendents, however, who are not particularly enthusiastic over these associations. This is by no means an argument against the latter. There are superintendents, nevertheless, who come out openly against these associations and frankly give their reasons for their opposition.

The reasons boiled down to a few words mean that the parent-teacher association, unless properly guided, is likely to become meddlesome in matters of a purely administrative character.

There comes to our attention a case which applies to a school situation in one of the California cities. The school board of that city found it expedient to dismiss a married woman teacher from the schools. The association not only registered its protest in vigorous language but incidentally criticized the board severely to making a reduction in the teacher-salary schedule, and warned the school board not to remove any more married women teachers now in service. The protest movement, however, did not end here. Steps were taken to inaugurate a movement by which at least two of the members of the school board are to be recalled. Legal advice as to the procedure here was obtained.

The incident illustrates to what lengths an organization may go when once it loses itself as to its true scope and function. When it begins to meddle with the appointment and dismissal of teachers, and the matter of salary schedules, it is on the way to usurp the function of the school board itself. It simply means that the parent-teacher association is to supplant the board of education, or at least to compel the latter to obey the dictation of the former. The real interests of the school child, which are presumably the immediate concern of both parent and teacher, become secondary. The interests of the teacher become primary, and the school executive who does not bend to this conception of things comes under the ban.

Do everything you can to improve the schools, not so much by way of criticism of what is bad as by praising what is good. Take the school that is best in your community and talk that up. Make other schools and those who are interested in education see their deficiencies by comparison with the good school. We can always get people ahead more rapidly by praise than by blame. — *James E. Gregg.*

¹The writer of this editorial happens to serve as a member of a federal board of public works for the State of Wisconsin, and may, therefore, venture some observations on the subject. Primarily, we are here concerned with schoolhouse projects which come within the scope of the recovery act.

"I LOVE A PARADE"

G. L. Koonsman, Superintendent of Schools, Brighton, Colorado

I love a parade and so do the children and so do their parents. Few schools capitalize this fine opportunity to demonstrate to the public in a striking visual manner the extent of the job that schools have to do.

In Brighton, Colorado, it has been a custom for a number of years to make use of this love of pageantry and show by means of an annual Columbus Day parade. It is, indeed, difficult for even the school executive to visualize the spectacle of 1,200 children marching by two's and four's until he has actually put them out on the street and sees them stretching out block after block.

No parent will fail to thrill to the rhythm of a good march, played by the school band, to the color and motion of flags, to the artistry of floats, and to the comedy of a few clowning youngsters. The spirit awakened in the minds of school patrons finds expression in the repeated question: "Well, where do they all come from?" Exclamations of: "Well, I never had any idea that there were so many children in the whole county." Such statements show that the school patrons and taxpayers have a new conception of the magnitude of the school system and its problems. For a considerable time after an annual parade much less will be heard by way of criticism of the schools.

Children of different ages respond differently to the preparations for and participation in a parade. Small children are simply thrilled, and their play spirit causes them to eagerly await the day of the parade. Children in the intermediate grades and the junior high school delight in any activity which involves costumes and the construction of floats, signs, and decorations. They will work actively in originating signs and decorating floats. Senior-high-school students are more mature and are inclined to be lacking in interest, unless a motive for taking part is presented to them. They will respond to the opportunity of showing the accomplishments or purposes of organizations or activities in which they are interested. This fact has been used by the Columbus High School to bring home to the community the work of such organizations as the Commercial Club, the Pep Club, the football team, the school paper, and the Girl Reserves. Students who are not otherwise interested have responded to a football rally which has usually been made a part of the parade.

We feel that this parade activity has both educational and publicity values to the school. If you want to give your public a new idea of your school, just try a parade.

THE HOME ROOM IN THE HIGH SCHOOL

(Concluded from Page 24)

should be filled in from time to time. The general outline is very helpful to beginning teachers, and it also serves to stimulate to some extent the lazy teachers. It gives the principal

a general idea of what is being done. The home-room program is sometimes built around the seven objectives of education: character, citizenship, fundamentals, health, home, leisure, and vocations.

A core program should be provided for all the home rooms in a given grade. In the lower grades of the high school this core program may well constitute a considerable portion of the entire home-room activity for the entire school year, but in the upper grades it should be smaller. In some high schools a limited core program is used in every home room regardless of grade classification. Caution should be exercised, however, in order to avoid making the home-room activities just another course of study.

In Tulsa High School, Tulsa, Oklahoma, a 25-minute period is devoted daily to home-room work. The principal¹ reported that the following core content is mapped out for home rooms of each grade:

1. Applied appropriate parliamentary procedure.
2. Study and practice of the principles of thrift.
3. Discussions of desirable student citizenship qualities and the formulation of suggestions affecting student policies both within the school and in the community.
4. Weekly reports from the house of home-room representatives.
5. Support by subscription, purchase of tickets, and the making of contributions to the various school or community activities.
6. Sympathetic personal counseling, directive conferences, and educational guidance. All registration details are cared for in home rooms, so that we are able to run a full day of school the opening day of each semester.
7. Election of school officers, including the discussion and evaluation of desirable officer traits, the selection of nominating delegates, and balloting on nominees in the final election.
8. Promotion of school art league through a penny-a-week contribution and study of the school's art exhibits.
9. Daily reports from the fellowship committee regarding students absent from school on account of personal illness or for other reasons.
10. Study of Hutchins' *Ideals of the Good American*, Collier's *Moral Code for Youth*, learning of the American's Creed, Preamble to the Constitution, national anthems, pledge of allegiance to the flag, and study of flag etiquette.
11. Learning the school's creed, school songs, school yells, and an understanding of the school seal and the coat of arms.
12. The preparation of individual home-room programs for class assemblies.

Among the topics for consideration in home-room programs are the following:

1. Traditions and rules of the school
2. The program of studies
 - a) Curriculums offered
 - b) Constants, variables, and electives
3. The daily schedule of recitations
4. Guidance
 - a) Educational

¹Pruntv. Merle, "Tulsa High School," *Twenty-fifth Yearbook*, National Society for the Study of Education, 1926, pp. 188-190.

- b) Personal
 - c) Vocational
5. How to study
 6. Good citizenship
 7. Noted men and women (on their birthdays)
 8. Conduct in assemblies, in the corridors, at games, on the street, etc.
 9. Improving the average daily attendance
 10. The cost and value of an education
 11. Thrift
 12. School publications
 13. Safety
 14. Student organizations: the council, the clubs, etc.
 15. Leadership and followership
 16. The Honor Roll
 17. The National Honor Society
 18. School spirit, school yells, school songs, etc.
 19. Habits

A high-school boy once remarked that the home room is "a bunch of baloney." Apparently the home room he knew did not function properly. A traveling man once told a waitress in a restaurant that he wished chicken but not "airplane chicken" — the kind that is all wings and machinery and no meat. Just so the home room should be a living, vital factor in the high school. "As goes the home room, so goes the school."

EXPENSIVE TRANSPORTATION OF SCHOOL CHILDREN IN PRIVATELY-OWNED BUSES?

(Continued from Page 41)

feature is that practically all schools that have employed high-school students are in favor of them, while those that have never tried them would not think of doing so.

Objection to Privately Owned Busses

A great accusation against private ownership is that poor busses are used. Anything that would run was all that was necessary, and unfortunately that condition still exists. Dozens of examples might be found but only two will be cited.



A PRIVATELY-OWNED BUS OPERATED IN HURON COUNTY, 1931-1932. TRANSPORTED 19 PUPILS AT THE COST OF \$45.00 PER PUPIL PER YEAR.

A district in Huron county operated a 1920 model, Pilot Six touring car in 1931-32. This bus made two trips hauling 19 pupils in the two loads. A bench was used between the seats to take care of the overflow, and the only protection from the weather was a set of side curtains. This bus cost the district \$5 per month per pupil, or \$45 per year.

In Union county, an old delivery truck was turned into a school bus. It was neither safe, sanitary, nor comfortable. It stood high in the air and had no windows, yet it cost the district \$30 per pupil.

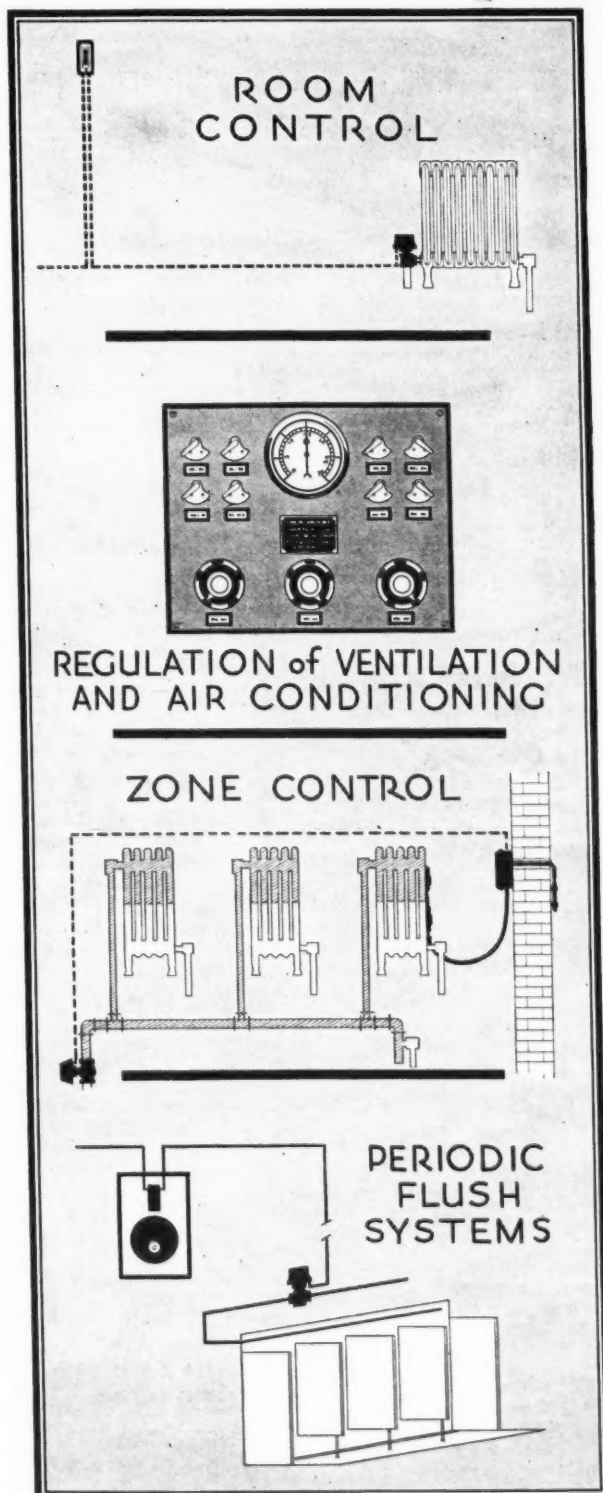
We are paying these high prices for service which is outrageous in many cases, \$30 and \$45 per pupil in these community disgraces, luxuries which the district cannot afford. We do this when it is possible to secure comfort and safety in modern busses, owned by the school district, for \$16 to \$25. Someone will say that it is the fault of the local district if they permit such busses to be used. It is true, it is the fault of the board of education, but if they raise their standards and demand more, they will necessarily have to pay more. The Sandusky county fleet of busses which was pronounced the best in the state in February, 1930, is made up mostly of district-owned busses, which operated in

(Concluded on Page 46)



SECTION OF THE SCHOOL PARADE, BRIGHTON, COLORADO

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(Concluded from Page 44)

1931-32 for \$18.42 per pupil. This fleet was discussed in the SCHOOL BOARD JOURNAL in an editorial in the May, 1931, issue. The argument that district-owned busses are abused because they are not driven by the owner carries no weight, because many districts are now letting their entire contract to one man who owns the busses and hires all drivers, subject to the approval of the board. They feel that this plan is better, thus they have adopted the feature they opposed so strongly in district ownership.

The big obstacle in the way of district ownership of busses is to find the funds necessary to make the original purchase. Once the system is established it would work out very well. A school that operated seven busses could buy a new bus each year without touching the savings that had been made. The amount charged off to depreciation on the seven busses would buy a new bus.

The other evil, that of the abuse of busses, could be and is being remedied, by employing a good mechanic on full time. He could drive one of the busses and spend the remainder of the day in keeping the rest of the fleet in condition. A clause should be included in every driver's contract, making it possible to discharge him if he becomes careless and negligent with the bus at any time.

Economies in Purchase of Supplies

The purchasing of supplies offers another field for saving in the district-owned busses. The school that operates several busses can purchase gasoline, oil, grease, and tires at wholesale prices. That means at least two cents saved on each gallon of gasoline and a much larger saving on the oil. There is also the possibility that in the near future, the gasoline used in school busses may be exempt from the state tax of four cents per gallon. District-owned busses are now granted county license tags free of charge, and they should be exempt from the gasoline tax on the same basis that they are exempt from the other; namely, that nothing is gained by levying a tax on something which is in turn paid by other taxes.

The schools are being pushed to the limit in an attempt to make the expenses balance with the in-

come. We are retrenching, shortening terms, doing without necessary equipment and supplies, while at the same time we are paying \$30, \$40, even \$45 per pupil for poor service in transportation. There is an inconsistency, yet we are doing nothing about it. We should plan a program over the next ten years which would give us efficient transportation, but at the same time save money to go either into equipment to further the education of the children or into the pockets of the taxpayers.

NEW YORK STATE BEGINS STUDY OF SCHOOL COSTS

The New York State Commission on School Finance, of which Mr. Charles C. Burlingham is the director, has appointed Prof. George D. Strayer, of Teachers College, Columbia University, as director of studies for a survey of school costs which the commission is making for the state. Dr. Strayer serves without pay, Columbia University having generously released him for the purpose. Dr. Strayer will work under Mr. Charles C. Burlingham, director of the State Commission on School Finance, and as a part of his duties, will make an analysis of the state's financial resources, the resources of the cities and school districts, and will study the various reports on school finance made in the last few years. Dr. Strayer headed a commission which did a similar work for Chicago, and at various times has made studies of educational problems of several cities and states.

NEW PLAN TO FINANCE EMPLOYMENT OF CHICAGO TEACHERS

Supt. William J. Bogan, of the Chicago public schools, has appealed to Secretary of the Interior Ickes in Washington for federal funds to finance the employment of Chicago teachers who are out of work. The money would go toward the teaching of classes in Americanization and English and would be similar to a plan in operation in New York City.

It was estimated that approximately 500 teachers would be employed to instruct more than 5,000 persons. Some of the teachers would be those now on the relief rolls, and others those who would be temporarily out of work because of the operation of the board's economy program. A salary of \$15 a week would be paid each teacher for a minimum of 22 hours of service, 15 of which would be used for instruction and the rest for conferences.

SCHOOL FINANCE

♦ Lowell, Mass. A survey of local school costs, with particular reference to the high school, has recently

been completed by Mr. W. D. Parkinson, of Fitchburg, and submitted to the finance commission.

Mr. Parkinson's report takes serious issue with the action of the school board in curtailing the school year as an economy measure. He pointed out that this step would be likely to seriously affect the receipts of the city on account of its operation of the high school. It would also have a serious effect upon the student body, not only in the high school, but in the grades. He also objected to the shortening of the school year. The purpose of the proposed vacation was to discontinue the salaries of employees for the period of the shutdown, making a further reduction of 10 per cent in salaries already reduced 20 per cent if over \$2,500, 15 per cent if over \$2,000, and 10 per cent if below that figure.

♦ Cleveland, Ohio. The voters will be asked to approve an additional 1-mill tax levy at the November election. This levy, which will produce approximately \$1,000,000 annually, is considered necessary for financing the schools this year. The failure of the levy would mean a serious curtailment of school activities, or an early closing of the schools next spring.

♦ Indianapolis, Ind. The school board has proposed a tentative budget of \$5,755,583 for the school year 1933-34, which is a reduction of \$780,000 below the estimate of a year ago. It is anticipated that the city schools will receive \$87,000 from the beer excise tax which is paid on the basis of average attendance.

♦ Findlay, Ohio. The school board has adopted a budget of \$267,881 for the school year 1933-34, which represents a reduction of \$37,000 under the estimate for 1932-33.

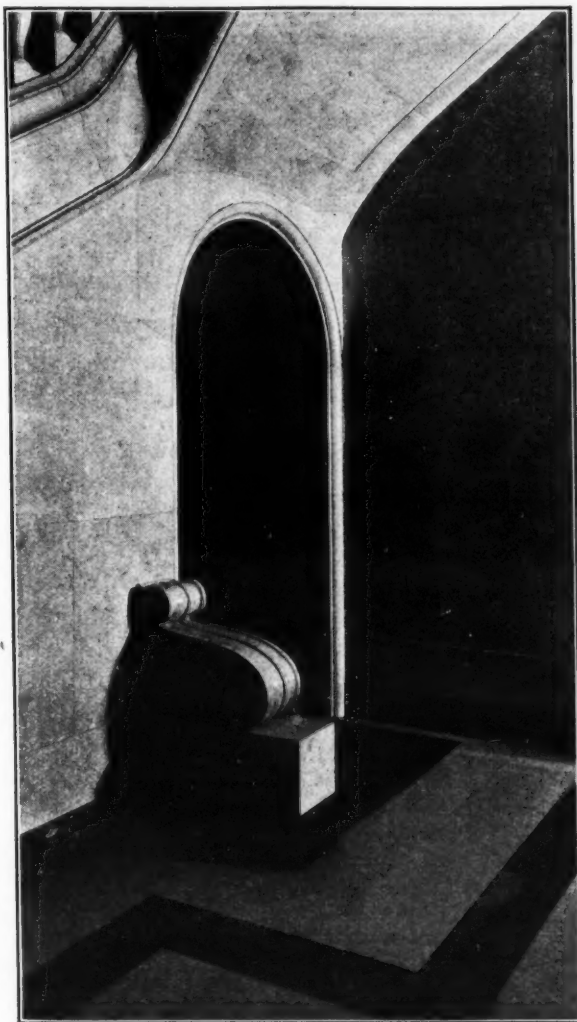
♦ Hamtramck, Mich. The policies of the school board for the school year 1933-34 remain the same as for the year 1932-33. The school system has always enjoyed a low per-pupil cost and for years has had large classes, so that the possibilities for economies have not been as great as in many school systems. So far, the services of the schools have not been eliminated.

During the school year 1933-34, all school employees are guaranteed at least 50 per cent of their respective salaries, with a minimum guarantee of \$1,000 a year for teachers and custodians, and \$720 a year for clerical help. As much more will be paid until the full amount of the salaries is paid as received from the various sources of the schools.

♦ Stillwater, Minn. The school board has adopted a budget of \$85,000 for the school year 1933-34, which is a reduction of \$2,500 from the estimate of 1932-33. The reduction in the budget was largely effected by a reduction in teachers' salaries.

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NEW BOOKS

State Support for Public Education

By Paul R. Mort, assisted by the Research Staff of the National Survey of School Finance. Paper cover, 496 pages. Published by the American Council of Education, Washington, D. C.

This document constitutes the results of a study made under the auspices of the Department of the Interior in response to a congressional act approved February 14, 1931. It summarizes the status of educational expenditures, and points out some of the trends in state school support.

A series of illuminating charts and maps are introduced which bring to the surface the teacher-salary status as applied to the country at large. There are also maps that summarize the teacher service in the rural elementary schools. The text goes, state by state, into details on these phases of American education, and brings out significant and interesting comparisons.

A chapter is devoted to the evolution of principles underlying state school support in its relation to local support. Here the report says: "The most desirable plan for determining the amount of the state's contribution to the support of the educational program is the plan which bases the amount of money which is to be provided by the state upon set guarantees to individual districts. In order that proper budgetary procedure may be followed in individual districts, such districts must be able to predict with accuracy the amount of funds which they will receive from the state. By and large in state support programs today districts are not able to predict with accuracy the amount to be received from the state."

In touching upon the subject of taxation, the report argues that "Because of the importance of the property tax in the financing of local initiative, the taxes which are used for obtaining state funds, not only for education but for other purposes, are of great importance to education. An analysis shows that the states vary in the percentage of revenue collected by the state government from sources other than the property tax, from 31 per cent to 100 per cent. Half of the states raise less than 72 per cent of their revenues from taxes other than the property tax. Other things being equal, the indications are that states in which state government encroaches upon the property tax provide less adequate financing for schools."

An illuminating chapter is provided which discusses the financial provisions for local initiative in the various states. Tables are also presented which show the rate of the mill tax exacted and names the authority that fixes them.

The experts also enter exhaustively into school-finance statistics, covering the period from 1910 to 1930. A study, too, is presented on the subjects of tuition and transportation.

Considerable space is given to the legal provisions involved in the apportionment and distribution of state school funds.

The World Book Encyclopedia

Century of Progress (1933-34) edition. Quarto, 8690 pp., 18 vols. W. F. Quarrie and Co., Chicago.

Under present methods and demands of education, the encyclopedia is an essential part of any school library. Hence pupils are expected to go beyond their textbooks for knowledge. Strict textbook learning is, necessarily, circumscribed learning. The school encyclopedia need not contain every small detail on any subject, nor need it be profoundly learned nor technical, but it should contain as much information as is ordinarily sought, and it must be intelligibly and interestingly written, and well illustrated.

The present encyclopedia seems to meet these requirements splendidly. It contains a vast amount of matter, is well written, well organized, and well illustrated. All subjects under any letter are found in a single volume, and each article carries a complete index of related topics.

The work embodies the most recent changes in all fields of human thought and endeavor; and is as complete as any nontechnical work of its kind could well be expected to be. As a revision of the previous edition it involved the change of over 3,000 pages, in the addition of new articles, new illustrations, and the revision of old articles. Among the items of most recent interest are articles on President Roosevelt, technocracy, Radio City, and illustrations of the World's Fair buildings.

The illustrations are numerous and quite uniformly good. Full page illustrations, many of them in color, are frequent.

The set will meet all school requirements, and deserves the consideration of those interested in a school encyclopedia.

Literature and Life — Book One

By Edwin Greenlaw, William H. Elson, Christine M. Keck, and Dudley Miles. Revised edition, 640 pages, illustrated. \$1.80. Scott, Foresman and Company, Chicago, Ill.

This is a revised edition of the first volume of a series that has for several years proved quite popular in our high schools. Its obvious purpose is to supply in one volume all the literature necessary for the first year of high school, together with suitable introduc-

tions, leading questions, discussions on various types of literature, references for further reading, etc. But a further and no-less-important objective is, as we gather from the preface and see worked out in the book, a proper organization of all this material. The original book grouped the selections into four sections each centering around a major theme; namely, Adventure, Legend and History, Man and His Fellows, and The World in Which We Live. While this scheme has been retained in the new edition, the main divisions are subdivided into smaller teaching units based upon rather narrow subdivisions of literature. Each of these units is preceded by an introduction and followed by a backward glance. Each of the four main divisions also has its introduction and review sections.

The selections, which are in nearly all cases well chosen, are reproduced from the works of both old and modern authors. Our only criticism is that the editors have failed to delete or edit certain passages, for instance in *The Lady of the Lake* and *Julius Caesar*, which, whatever their effect upon mature readers, are undesirable for young people of ninth-grade age.

First-Year Algebra

By Homer B. Kingsbury and R. R. Wallace. Cloth, 450 pages. Price, \$1.32. The Bruce Publishing Company, Milwaukee, Wis.

This book has been prepared to advance the general objectives of the high school in the field of mathematics and to combine the elements of adaptability, comprehensiveness, and student needs which all teachers have been seeking. The authors have succeeded in producing a text that is well written, but in many respects a distinct advance over older books, and still not too advanced nor too difficult.

In the topical arrangement and in the sequence of chapters, the work meets the fundamental requirements of all the standardizing agencies. The exercises which have been chosen with due regard for reality and student interest, are divided into two levels of difficulty. There is a generous amount of work for the average student and there are additional "honor work" problems for the more able and quicker boys and girls.

The equation has been emphasized throughout the book. The subject is introduced with full recognition of the student's understanding of the fundamentals of arithmetic. The final chapters lead into a simple introduction to geometry and trigonometry.

Ample reviews and testing material of the timed kind are included in the book. The final chapter describes the historical development of the subject.

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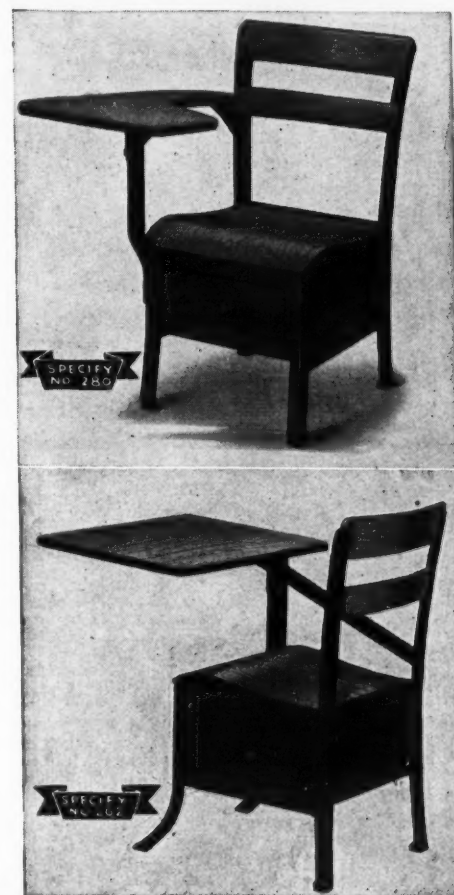
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New Deal Primer

Prepared by E. E. Lewis. 64 pages. Price, 35 cents. American Education Press, Inc., Columbus, Ohio.

This "primer" explains for school use the present program of the Federal Government for the improvement of economic and social conditions. The twenty units or chapters of the book take up in detail the underlying economic and social principles which the government is attempting to put into force—the governmental machinery of the N.R.A., the farm-relief program, banking reform, agricultural adjustment, the controlled inflation program, the Tennessee Valley program, civilian conservation groups, home-owners relief, and the railroad program. Each of the units has been prepared by an experienced schoolman who understands the principles of teaching as well as of social science. The booklet is fully and interestingly illustrated.

Junior English in Action

Book One. By C. Tressler and Marguerite B. Shelmadine. Cloth, 364 pages, illustrated. \$1. D. C. Heath and Company, Boston, Mass.

Brief, clear explanations, models or examples, and plenty of drill on correct speech and writing are the characteristics of the three books in the "Junior English in Action" series. Book One is intended for the seventh year. Part One, Writing and Speaking, deals with both oral and written composition of sentences, paragraphs, letters, as well as with conversation, reading, and memorizing. Part Two deals with the elements of grammar applied to actual use.

St. Ignatius and the Ratio Studiorum

Edited by Edward A. Fitzpatrick. Cloth, 288 pages. Price, \$2. McGraw-Hill Book Company, New York City.

The vast influence of the Jesuits and their system of education has been felt but has not been generally understood because the basic documents upon which the plan and program are founded, have not been available. The present book includes a scholarly introduction, together with the complete *Ratio* of 1599 and Part IV of the Constitutions of the Jesuits. The latter are the administrative rules of the Society and touch the "temporal affairs" of colleges, the training and supervision of teachers, courses, degrees, and similar general matters. These rules must be read in connection with the *Ratio* so that its detailed prescriptions for teachers may be understood. The editor has also added an outline of the *Spiritual Exercises*—a document that is almost entirely unknown as an educational program, but of supreme importance for un-

derstanding the educational objectives of Ignatius and his very effective method of training the will and forming character. The introduction makes clear not only the significance of the *Ratio*, but also its very modern aspects when viewed in the light of recent innovations and discoveries in organization and method.

Graded Letters—Dictation for Modern Business

By John G. Kirk and George E. Mumford. Cloth, illustrated, 170 pp., 88 cents. John C. Winston Company, Philadelphia, Pa.

A practical book of exercises in shorthand writing. Part I is based on the 500 most commonly used words, so that its mastery will insure automatic recall of 70 per cent of all words that the student will ever use. Part II reviews the first 500 words and drills on the next 500 or more of a composite list. Part III consists of 50 letters in shorthand for reading drill. Part IV is a shorthand vocabulary of a composite list of 1,000 commonest words. The book is available for Gregg, Bann Pitman, or Isaac Pitman shorthand.

Suggestions on School Housekeeping. By J. C. Griffin and S. E. Clark. Paper, 17 pages. Bulletin No. 300, 1932, issued by the State Education Department of Texas at Austin. This bulletin is an attempt to give some attention to the physical side of teaching. It stresses the necessity of providing a comfortable and sanitary building for the teacher and pupils, together with the right kind of equipment, and the proper use of that equipment. The study touches upon correct methods of managing the various features of the school plant, giving particular attention to the school grounds, the water supply, the sanitary system, the play equipment, the school site, the shades, the exits, the wall finish, lighting, blackboards, library, heating and ventilation, and teaching equipment.

The Nelson High-School English Test. For junior and senior high schools—Forms A and B. By M. J. Nelson. Price, 12 cents. Houghton Mifflin Company, Boston, Mass. The tests are designed to determine the achievement of pupils in aspects of language knowledge which contribute directly to the proper use of English, to assist in the sectioning of pupils for instruction in English, and to predict success in composition and rhetoric. The material comprises the test, the directions for giving the test, and the answer booklet.

PUBLICATIONS RECEIVED

A Study of Unemployed Secondary Teachers in Minnesota, 1933, by T. J. Berning, statistician, Minnesota State Department of Education, St. Paul, Minn. This bulletin presents an extremely discouraging picture concerning the unemployment of

young men and women who have prepared themselves to teach in secondary schools and who have been unable to find positions. The author presents no conclusions but it seems clear that some limits of teacher training for secondary education is necessary.

Rules of the Road. Paper, 32 pages. Pamphlet No. 6, of the American Council on Education, Committee on Materials of Instruction, Chicago, Ill. A study of traffic rules in different countries and during different periods in history. Suitable for safety instruction.

A Point Scale of Performance Tests, by Grace Arthur. Cloth, 118 pages. Price, \$1.50. The Commonwealth Fund, New York City.

This book is an account of the procedure and data used in developing a point scale of performance tests. These tests are an important contribution to the aids available to teachers for determining the intelligence of the children who have language handicaps and whose ability can only be determined by the use of nonverbal tests and scales.

An Evaluation of School Health Procedures, by Raymond Franzen. Paper, 142 pages. American Child Health Association, New York City.

This is a study of the knowledge which teachers have of the health deficiencies of their pupils. It evaluates teachers' health participation in the health program and suggests principles which will make school health procedure more effective.

Municipal Debt Defaults: Their Prevention and Adjustment. By Carl H. Chatters. Paper, 55 pages. Public Administration Service Bulletin No. 33, of the Municipal Finance Officers Association, Chicago, Ill. A study of public administration service, undertaken by a group of men of practical experience in the problems involved. The report is specific, concrete, and constructive and should be of help to operating officials, bondholders, and interested citizens.

The Education of Teachers and the Financial Crisis. Circular 110, July, 1933. U. S. Office of Education, Washington, D. C. A study of the economies put into effect by teacher-training institutions to offset the losses in income. The study does not touch the broader problem of the overproduction of teachers, but suggests the necessity of eliminating the unfit and limiting enrollments.

Iowa Silent Reading Tests. Elementary Test. Prepared by H. A. Greene and V. H. Kelley. Price, \$1.25. The World Book Company, Yonkers, N. Y. This elementary test for grades four to nine has been prepared in response to a demand for a test constructed on the same plan as the test for high schools and colleges. The test covers a wide range of skills indispensable to effective reading of the work-study type, and affords a ready basis for giving specific training to improve and refine the pupils' reading habits and skills. One of the important functions of the test is its use by the teacher in determining the exact estimate of the level of development of the several elements of silent-reading ability in the class, as well as giving specific information concerning limitations of the individuals in the class. The test should prove valuable in the sectioning of pupils into groups for remedial instructional purposes.

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School Board News

♦ Milwaukee, Wis. The school board has adopted a suggestion of the building committee, providing a plan of school-board purchases by which only firms complying with the N.R.A. will obtain business. Under the rule, no goods, materials, supplies, or equipment of any kind, or services, will be purchased by the school board from firms within or without the state which do not comply with the N.R.A. requirements.

♦ Valley Stream, N. Y. The board of education has passed a new rule which requires that supplies for the schools be purchased only from firms who have signed the N.R.A. code. In presenting the resolution, James Pierce, a member, argued that the schools must get behind the President in the operation of the new industrial code. In order to make certain that only N.R.A. firms are dealt with, a notation on the bottom of orders will inform merchants that the order is made with the understanding that the prospective seller is working under the code.

♦ Springfield, Mass. Pupils attending the junior college in the Central High School will continue to pay annual tuition charges amounting to \$190. The fee had been adopted during the school year 1932-33 and it was decided that the fee was reasonable and should be continued.

♦ Duluth, Minn. The opening date of the school year was advanced to September 5, adding two more weeks to the school year. The school year will be 38 weeks in length in place of 36 weeks, as was the case last year.

♦ Cedar Falls, Iowa. In its endeavor to maintain all departments of the schools as usual, the school board has this year refrained from curtailing any department or essential activity. In order to effect the necessary economy in operating expenditures, the board has revised the salary schedule downward, with a substantial saving in the salary item.

♦ Fairfield, Ill. One of the new educational features this year is the assignment of time to pupil training in citizenship, assembly and auditorium activities. The latest standard achievement tests are being used as a part of the administrative work.

♦ Chicago, Ill. More than 4,000 seats have been provided and 85 ill-ventilated portables abandoned, through the operation of the school board's economy

program this fall. New seats were provided for high-school students through the conversion of two former junior high schools into senior-high-school plants. Six elementary schools with half-day classes were put on full time as a result of the changes. Thirty special rooms, as well as seven other rooms, have been equipped with seats.

♦ In compliance with the N.R.A. code, the school board of Ferndale, Mich., has employed five new janitors, at \$16 a week. The men were selected from the city's list of unemployed men.

♦ Oklahoma City, Okla. Mr. Day Fezler, president of the school board, has suggested that \$1,400,000 in school insurance be not renewed at this time and that the board refuse to increase the insurance \$600,000 as recommended by a committee of insurance men, contractors, and architects. Mr. Fezler made the suggestion on the basis that 79 per cent of the school buildings are fireproof. He urged that the board work for the passage of a legislative measure which will allow the school district to carry its own fire insurance.

♦ Springfield, Mass. The school board has completed plans for the erection of an addition to the Technical High School this fall, at an estimated cost of \$350,000 to \$400,000. The addition will provide additional space in the school and will relieve the present congested condition.

♦ In the Springfield, Tenn., city school system, five school buildings and a gymnasium have undergone extensive repairs during the months of July and August. All furniture, desks, seats, etc., have been varnished, blackboards reworked, and buildings painted inside and out, with a general cleaning program from basements to roofs.

No reduction of any kind has been made in the school budget for the school year 1933-34. An increase of 200 per cent was allowed in the budget for maintenance and repair.

♦ Omaha, Nebr. During the fiscal year ending on August 1, the school board spent \$74,763 more than it received, according to a financial statement presented to the board. The total receipts for the year were \$3,543,097, as compared with \$4,171,606. Expenditures were reduced 15 per cent during the year and a larger cut is planned for the new school year.

♦ Garrett, Ind. The prospects are fair for a full nine-month term of school this year. The length of the school year is dependent on the amount of state aid which will be received from the state.

♦ Mangum, Okla. A complete reorganization of the commercial department has been effected with the open-

ing of the new school year. The course of study has been expanded to bring it up to the standard.

♦ The board of education at Pittsburgh, Pa., has begun a study of handicapped children. The study, which is being carried on by teachers, principals, and medical inspectors, will include also a study of truancy cases bordering on juvenile delinquency.

♦ Seymour, Ind. The high school has introduced the supervised study plan, providing for six periods a day. The extracurricular program has been given an extra period once a week for the use of the various clubs and school activities. The plan, which was tried last year, is being extended for the present school year.

♦ Portland, Ind. A change has been effected in the schedule of school periods in both the junior and senior high schools. During the present school year there will be six periods of 60 minutes each for recitation and study, in place of eight periods of 45 minutes. The new schedule provides more time for supervised study.

♦ Muncie, Ind. A distinct advance in education has been made this year, with the introduction of a science-and-health course. This course takes the form of a trunk-line course throughout all grades, making four main trunk-line courses, including language, arts, mathematics, social science, and science and health.

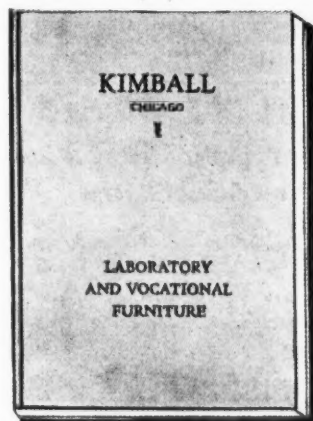
♦ Clinton, Ind. Physical-education work and supervision of music and art instruction have been eliminated as an economy measure. Music and art instruction will be continued with the aid of the regular classroom teachers.

♦ Springfield, Mass. The school board has discontinued examinations for the admission of pupils under six years of age to the first grade and the admission to the first grade of pupils reaching the age of six prior to September 1.

♦ Kewanee, Ill. The dean-of-girls office in the high school has been discontinued, and each homeroom teacher has been designated an adviser and guidance instructor for her group. Girls and boys have separate homerooms under the plan, the boys having men advisers and the girls women advisers.

♦ A two-year high-school course is being offered students of Delaware township, near Des Moines, Iowa, at the Berwick School. Formerly students were allowed to attend any high school of their choosing with the township paying the tuition. This year the ninth and tenth grades will be taught at the Berwick School.

♦ At least seven rural-school districts in Ross county, Ohio, will this year operate on the six-year high-school plan, or on a plan which will ultimately lead to the six-six plan. The town of Adelphi has asked for a six-year school charter. Under the new plan, the school



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will enlarge its schedule by the addition of new courses, and a staff of five teachers will be employed to take care of the 120 pupils.

♦ Duluth, Minn. The schools' committee of the board of education has considered a suggestion to refuse contracts to teachers residing outside the city who are not under the tenure law.

♦ Norway, Mich. The public schools are operating for the school year 1933-34 with three less teachers than last year. This is a reduction of eleven teachers from the staff in the last five years.

♦ The Supreme Court of Florida has ruled that the new nepotism law, prohibiting officials to employ relatives, does not apply to teachers. The ruling was given in a test suit by Mrs. Gertrude M. Robinson, whose reappointment as a teacher in the Plant City schools was not approved by the county school board under the new law. The court held that the law did not apply to teachers because other laws and rules govern their appointments and provide for examinations and methods of establishing their merits.

♦ Shawnee, Okla. The rental plan for schoolbooks is being continued this year in both the junior and senior high schools. Fees for junior-high-school students will be \$2 a year, and for senior-high-school students \$2.50 a year for books, tablets, and incidentals.

♦ A resolution for withdrawal of state-aid funds and for withholding accredited affiliations from schools refusing to use newly adopted textbooks has been passed by the Oklahoma State Board of Education as a means of forcing the complete use of the new adoptions. The State Board of Education, working under instructions from the governor, had sought to enforce the provisions of its resolutions, which are intended to force all teachers and school districts to use the new books. State Superintendent John Vaughan, a member of the board, voted against it, declaring it a big club to compel use of the books adopted by the textbook commission.

♦ The attorney general of West Virginia has ruled that school boards in the state are not liable for any accident or injury incurred by children riding in school busses. He advised the carrying of accident insurance, with special mention in the policy that insurance companies shall not evade payment of claims by asserting that school boards are not liable. The opinion was given to the county board of education of Ohio county which had become interested in the subject. It was the sentiment of the members that insurance should be carried.

♦ Attorney General John W. Bricker, of Ohio, has ruled that state funds cannot legally be made available for the aid of parochial schools, under the Ohio constitution. The opinion was given in response to a request from State Superintendent B. O. Skinner, who had received inquiries from Catholic church officials on the point. The opinion contended that a school administered otherwise than by public-school authorities as a part of the public-school system of the state and supported by funds other than public-school funds is a "private school."

♦ Trustees of school districts in Montana who fail to notify a teacher, who is disqualified for her duties under the new nepotism law, that her services are no longer required, are guilty of violating the law and are subject to punishment under its provisions, according to a ruling of Attorney General Raymond T. Nagle. The ruling was given in a case where the teacher, disqualified by the law, had assumed that she had been retained because the school board had not notified her of her dismissal. The law has brought about a good deal of confusion in rural schools of the state, resulting in many dismissals of teachers related to board members, and resignations of board members to obviate the necessity of dismissing teachers to whom they were related.

♦ The Superior Court at Bridgeport, Conn., has ruled that the board of education is not subservient to the actions of the Common Council. The court refused to enjoin the school board from entering into a contract with a power company for the installation of oil-burning equipment in three school buildings.

♦ Western Springs, Ill. All classes during the 1932-33 school year were maintained on a half-hour basis, due to a drastic curtailment of the school program because of tax delinquencies. By this procedure and the sale of tax-anticipation warrants to local citizens, the schools were enabled to reopen this year on a full-time basis. The tax problem is the most important problem now before the school districts of Cook county. Half of the population of the state is affected by the delay in the issuance of tax bills, as well as by large delinquencies in tax payments.

♦ Duluth, Minn. The school board has received an opinion from its attorney, D. S. Holmes, to the effect that the board is not compelled to reemploy teachers not under tenure law. As a result of the opinion, the board has released ten instructors not under tenure, who were nonresidents of the city.

♦ Fall River, Mass. Postgraduate courses will again be offered in the Durfee High School this year. The

school board voted to rescind the action of last year's board in barring postgraduate enrollment.

♦ The Sioux City, Iowa, public-school system provides a preliminary spelling survey in each grade at the beginning of each semester. The examinations are given in all grades from the third through the sixth, and are intended to provide teachers with a clear picture of the teaching problems to be met during the school year. The tests are based on the Horn-Ashbaugh spelling list and information concerning the scores are compiled in the superintendent's office so that each teacher may understand how her grade stands in relation to the general averages in the community.

♦ Madison, Wis. A group of local bookstore operators has recently charged that the board of education is guilty of unfair competition in the sale of supplies and textbooks. The store owners contend that the board is inconsistent when it rejects an offer of the state insurance fund to reinsure school buildings at less cost with the state fund, and then approves the sale of school supplies in competition with stores. Supt. R. W. Bardwell has promised to make a thorough investigation of the charges. He declared that all teachers have been instructed to refrain from selling supplies or making any recommendations on the purchase of supplies, such as rulers, pencils, paper, and copy books.

♦ Minneapolis, Minn. The board of education has voted to cut the salaries of teachers and other school employees 30 per cent for the remainder of the year. The school employees had previously suffered a 15 per cent cut in salary and they will also be compelled to take vacations of two weeks without pay. The reduction in salary is an economy measure which is intended to eliminate a deficit of \$681,000.

♦ Cedar Rapids, Iowa. Salary reductions, ranging on an average from 10 to 12 per cent, and effecting a total saving of \$6,000, have been ordered by the board of education for noncontract employees. The reductions were made to correspond with salary cuts received by teachers and other contract employees last spring.

♦ Seymour, Ind. Teachers' salaries have been reduced approximately 7 per cent for the school year 1933-34. This makes a total reduction of 15 per cent since 1929. No school subjects have been eliminated.

♦ Clinton, Ind. Teachers' salaries have this year been placed at the minimum for the state, which is \$800 for elementary teachers, and \$1,000 for high-school teachers.



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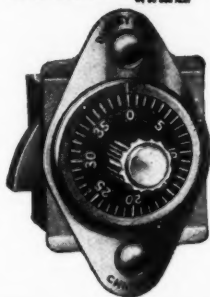




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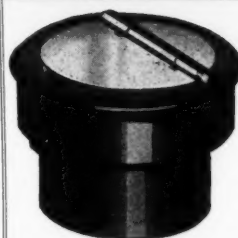
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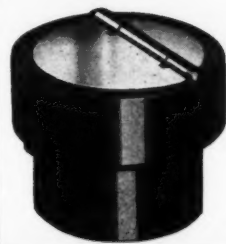
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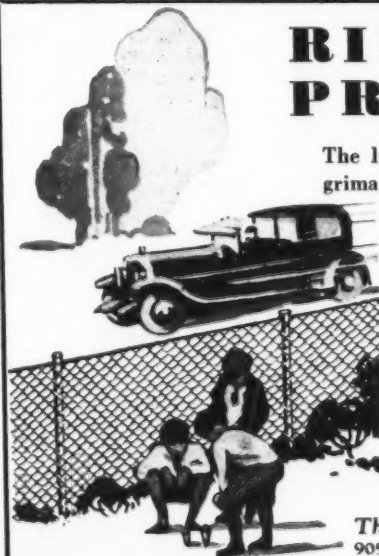
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Teacher: The law of gravity of course.

Pupil: Well, how did folks stay on before the law was passed?

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"The man I marry must be a gentleman and a scholar," Enid proclaimed.

"My dear," objected June, "that's asking too much of any college man."

Why Not?

Teacher: Let us imagine I gave you seven pennies.

Tommy: If they are just imagine pennies, why not make them dollars?

Good Reason

Friend (in bookstore): Hello, old man, making a purchase?

The Other: Yes, my wife's going to Europe and she wanted me to get her a book about the famous historical places in America so that she will be able to describe them to the foreigners she will meet.

The Change

Teacher: When water becomes ice, what is the greatest change that takes place?

Smart Boy: The greatest change is in the price.

Oh, Yes?

Senior Boy: "Well, I knocked 'em cold in Latin, all right."

Junior: "What did you get?"

Senior Boy: "Zero."

An Observing Child

The teacher was testing the knowledge of a kindergarten class. Tossing a half dollar on the desk, she said sharply: "What is that?"

Instantly a voice from the back of the room replied: "Tails!"

His Lunch!

The professor called his class to order shortly after lunch hour. "Our special work this afternoon," he said, "will be the dissection of a frog. I have a frog in my pocket here to be used as specimen."

He reached into his pocket and pulled out a paper sack, shook its contents on the table, and out rolled a nice-looking sandwich. The professor looked at it, perplexed, scratched his head and muttered: "That's funny, I distinctly remember eating my lunch." — Exchange.

Sharp Practices

Mary Roberts Rinehart, writing in *My Story* about her resourceful grandmother, says: "Completely untrained and with no openings outside of school teaching for women in those days, she fell back on her needle."

"Reminding one," comments A. W., "of the man who sat down on the spur of the moment." — Washington Star.

"The study of the occult sciences interests me very much," remarked the new boarder. "I love to explore the dark depths of the mysterious, to delve into the regions of the unknown, to fathom the unfathomable, as it were, and to —"

"May I help you to some of the hash, professor?" interrupted the landlady.

And the good woman never knew why the other boarders smiled audibly.



Schoolmaster (to new boy): "I suppose you can repeat the multiplication table?"

Boy: "Of course, sir. But I prefer to call it twice-two continuum." — Punch.

Buyers' News

MR. NENNEMAN PASSES

Mr. Walter F. Nenneman, secretary-treasurer of The Gregg Publishing Company, died at his home in Chicago, on September 13, after an illness of less than two hours.

Mr. Nenneman was the oldest employee of the company in point of service, having joined as an office boy thirty-two years ago. Rising from the ranks, he became subsequently bookkeeper, manager, and in 1910 secretary of the corporation. His work called for a great deal of detail, of which he was master, and his knowledge of the business made him a vital factor in its development. He was well known in educational and publishing circles for geniality and courtesy.

Mr. Nenneman is survived by his widow and by one daughter.

TRADE PRODUCTS

New Squires Boston Inkwell. The Squires Inkwell Company, Pittsburgh, Pa., has announced its new Boston inkwell No. 9, which has a top of bakelite material in place of the hard-rubber composition. The top is 1 27/32 in. in diameter, has the same thread as in former types, making it possible for schools to use the same glass as previously. The bakelite material has been found extremely strong, noncorrosive, and far more durable than the material formerly used. The cost is slightly higher, but is so small that school buyers will be willing to pay more for a superior product.

Complete information may be obtained by any school official upon request.

Beckley-Cardy's New Supply Catalog. The Beckley-Cardy Company, Chicago, Ill., manufacturers of school supplies and equipment, have just issued their new Catalog No. 56 describing and illustrating the new line of school equipment, including erasers, bulletin boards, blackboard supplies and equipment, crayons, window shades, maps, globes, clocks, duplicators, bells, floor-cleaning supplies, drinking fountains, drawing supplies, kindergarten materials, pencils, stationery supplies, seatwork material, diplomas, textbooks, and furniture.

A copy of the catalog will be sent to any school official who requests it.

Issues Book-Week Helps. The Macmillan Company through its juvenile department, 60 Fifth Avenue, New York City, has issued a collection of school program suggestions for Book Week. The pamphlet is available to school authorities on request.

Continue Music-Appreciation Hour. On October 6, Dr. Walter Damrosch will again begin his music-appreciation courses over the network of the National Broadcasting Company. At that time there will be begun again the courses designated as Series A and B — A for beginners, and B for those who successfully completed A last year. On Friday, October 13, Series C and D will begin for those more advanced. Instructors' manuals for teachers and notebooks for students have again been made available. The entire series of symphony concerts is a service of the National Broadcasting Company to the schools of America.

Personal News of School Officials

• Mr. CHARLES M. HOSTETLER has been elected secretary of the school board of East Waterloo, Iowa.

• Mr. A. J. HERTZ, 84, a former member of the school board of Iowa City, Iowa, died at his home on August 25. Mr. Hertz served as secretary of the board from 1907 to 1926, when he retired from public life.

• Mr. WILLIAM ROWEN, president of the board of education of Philadelphia, Pa., died at his summer home in Ocean City, N. J., on August 23, following a cerebral hemorrhage. Mr. Rowen, who was 81, was a native of Philadelphia. His services of three decades on the board had been uninterrupted, and he had been president for the past twelve years. The honorary degree of doctor of humane letters was conferred on Mr. Rowen by Temple University last June.

• Mr. JAMES H. BUCHANAN has been elected superintendent of schools at Lamar, Colo.

• The school board of Seymour, Indiana, has reorganized, with the election of DON A. BOLLINGER as president, GEORGE A. CLARK as treasurer, and LENORE SWAILS as secretary.

• Mr. G. W. SMITH, president of the school board of Canton, Ill., died at a hospital on August 30, following an operation.

• Mr. J. M. TRACY, superintendent of school buildings for the board of education of Rochester, N. Y., has retired, and his office has been filled by the appointment of Mr. FRANCIS R. SCHERER.

• Dr. J. W. THOMSON has been reelected a member of the board of education of Garrett, Ind., for a term of three years. Dr. Thomson has been reelected as president for the ensuing year.

• Mr. GILBERT W. SMITH, president of the school board of Canton, Ohio, died at his home on September 6, following an operation.

• Mr. HENRY F. MILLER has been elected a member of the school board at Michigan City, Ind., to succeed Howard C. Crosby. The board has reorganized for the year, with the election of D. M. HUTTON as president, HENRY F. MILLER as secretary, and T. F. MILLER as treasurer.

• Mr. C. A. HOWARD and Mr. E. F. ADAMS have been elected to membership on the school board of Accomack county, Parksley, Va.

• Dr. L. H. DENNIS, formerly deputy state superintendent of public instruction for the State of Pennsylvania, has become assistant state superintendent of schools for the State of Michigan. Dr. Dennis will have charge of secondary education, in addition to the supervision of teacher training and vocational education.

• Mr. E. L. CLARK, of Chelsea, Mich., has become superintendent of schools at Mt. Morris.

• Mr. LUTHER E. KELLY, 62, superintendent of schools at Montpelier, Ind., for 38 years, died at his home on September 6. Mr. Kelly, who was a graduate of the Indiana State Normal School of Terre Haute, was appointed to the superintendency in 1895, after teaching for several years.

• Mr. H. K. WHITTIER, of Iowa City, Iowa, has become superintendent of schools at Streator, Ill.

• Mr. GLENN T. ANDREW has become superintendent of schools at Sunman, Ind.

• Mr. W. E. STRICKLER has been appointed superintendent of supplies of the Pittsburgh board of public education. The salary has been fixed at \$6,000 a year.

• Mr. HUGH DOYLE, formerly principal of the high school at Gaylord, Mich., has become superintendent of schools, succeeding C. B. Hurd.

• Supt. J. M. SCUDDER, of Huntington, Ind., has been appointed a member of the national committee, which has been given the task of interpreting the schools to the public.

• Mr. ARTHUR CAMPBELL, of Frankton, Ind., succeeds W. A. Denny as superintendent of schools at Anderson, Ind.

• Supt. W. L. KOCHER, of Martins Ferry, Ohio, has been reelected for another year.

• Supt. G. W. BALDWIN, of Darby, Ohio, has been given the master-of-arts degree by Ohio State University.

• Supt. EARL F. SMITH, of Columbus Grove, Ohio, has completed work for the master-of-arts degree at Teachers College, Columbia University.

• Mr. JOHN W. ALLEN, of Eldorado, Ill., has been elected superintendent of schools at Fairfield.

• W. E. HARMON, an educator and state official in Montana, died at his home in Bozeman, on August 15. Mr. Harmon, who served with distinction in four divisions of public life, was known for his work as an educator. After many years in educational work at Livingston and Bozeman, he became state superintendent of public instruction. He brought about standardization of the teacher-certificate plan; revised the courses of study, and did much to establish a new educational system on a firm foundation. With the completion of his second term as state superintendent, he became secretary of state. He retired to private life in 1932.

• Supt. H. L. SHIBLER, of Mt. Gilead, Ohio, has been reelected for a second year.

• C. V. BRUNER, of Murfreesboro, Tenn., has been elected superintendent of schools at Mt. Pleasant.

• Mr. R. C. PUCKETT, of Iowa City, Iowa, has taken over the duties of principal of the Bloom township high school at Chicago Heights, Ill. Mr. Puckett recently received his doctor's degree from the University of Iowa.

• O. C. NUTTER, of Milton, W. Va., has been elected assistant superintendent of schools of Cabell county. The Cabell county board of education took over the administration of the schools of the county, under a new county-unit bill which went into effect on July 1. Mr. Nutter was awarded the master-of-arts degree by the University of Cincinnati last June.

• Mr. H. A. RICE, of Huntington, W. Va., has been elected first assistant county superintendent of Cabell county, under the new county-unit bill of West Virginia. Mr. Rice has all the powers of county superintendent.

• Mr. C. L. BEATTY and Dr. R. L. KEITHLY have been appointed as new members of the school board at South Haven, Michigan.

• Mr. LESLIE S. CALDWELL has been appointed as a member of the school board of Wildwood, N. J.

• Mr. O. W. VAN TUYL and Mr. EDWARD COSTELLO have been appointed as members of the school board of Greenpoint, L. I., N. Y.

• Mr. JOHN C. SNYDER has been appointed as a member of the board of education of Oswego, New York. He succeeds the late Hugh R. McGrath, whose death occurred on August 6.

• Mr. MATTHEW O'DELL has resigned as superintendent of properties for the school system of Portland, Oregon.

• Mr. IRA C. TILTON has been reelected to the school board of Valparaiso, Ind., for a new term of three years. The board has reorganized for the year, with the election of Dr. J. D. KUHN as president, Rev. C. W. WHARTON as treasurer, and IRA C. TILTON as secretary.

• Mr. JOSEPH W. CATHARINE, former vice-president of the board of education of Philadelphia, Pa., has been elected president of the board, to fill the unexpired term of the late William Rowen. Mr. Catharine was for many years chairman of the committee on schools of the board. He served as vice-president during the term of Mr. Rowen and was a strong supporter of lower school taxes.

SUPERINTENDENT GWINN RESIGNS AT SAN FRANCISCO

Dr. J. M. Gwinn, superintendent of schools at San Francisco, California, for the past ten years, presented his resignation to the school board on September 16, and the same was accepted.

Dr. Gwinn was graduated from the University of Missouri and the Warrensburg State Normal School. He holds advanced degrees given by the University of Missouri and Columbia University. After teaching for some years he became principal of a village school in Ashland, Mo., and later was a member of the high-school faculty at Nevada and Joplin, Mo. In 1902, he was made superintendent of schools at Joplin, Mo., and in 1903 became professor of education in the Warrensburg State Normal School. He resigned in 1907 to become professor of education and director of teachers' college at Tulane University.

He was elected superintendent of schools of New Orleans in 1910, a position which he held until 1923, when he became superintendent of schools of San Francisco. Following the completion of his first term of service, Dr. Gwinn was reelected in 1927 for a four-year term, after a very successful administration of the school system.

He is a former president of the Department of Superintendence and is an active member of state and national educational associations. Dr. Gwinn becomes eligible to retirement on a pension next June.

SCHOOL BOARD NEWS

♦ Indianapolis, Ind. The public schools opened on September 5 for a full school year. The 1933-34 school budget, which totals \$5,755,583, is \$779,897 below the estimate for 1932-33. The property-tax rate has been set at 99 cents on each \$100 of assessed valuation. It is anticipated that the city schools will receive approximately \$1,007,102 from the state under the new state taxation program, providing revenue from intangible, excise, income, and other forms of taxes.

The school board has reduced the number of teachers on the staff by 100, in order to balance its budget and to economize on operating expenses. The economies have been effected by the discontinuance of publication, research, and curriculum departments, the merging of cooking and sewing departments with the department of practical arts, the increasing of the teaching load, the elimination of adult day-vocational classes, the closing of the evening schools, the elimination of sick pay for teachers, and a reduction in the number of supervisory principals and in the appropriation for educational supplies and equipment. Reductions in teachers' salaries amounted to \$500,000 below last year's figure. Similar reductions were also made in salaries, maintenance, and operation of buildings and grounds.

♦ Joliet, Ill. The school board has arranged to issue bonds, under a law passed by the last legislature. The proceeds of the bonds will be used to pay the salaries of school employees. The arrangement became necessary because of a large tax delinquency and the need of funds to meet current operating expenses.

♦ Joliet, Ill. In order to balance the budget for the school year, the board of education has voted to pay school employees on the basis of 20 per cent less than the schedule of 1931-32. All advances in the salary schedule have been temporarily suspended.

♦ Chicago, Ill. The 1,368 teachers who were placed on the temporarily retired list by the school board in the execution of its \$5,000,000 economy program are out of work because they are not qualified to hold positions in the present day-school system, according to Supt. William J. Bogan. There was no discrimination in the recommendations of teachers to be placed on waiting lists. Even though their positions were abolished, these teachers of junior-high-school and special subjects who held certificates as regular teachers in high or elementary schools were retained. Those placed on the waiting list comprised those who lacked these certificates. The 191 junior-high-school teachers holding high-school certificates and the 711 who hold elementary certificates were ordered placed in schools for which they are qualified.

The school board, on its part, has made provision for assisting teachers in qualifying themselves to teach in the reorganized system. They are on a temporary leave-of-absence status, and special intensive courses will be offered at the Chicago Normal College to qualify them for the new type of positions to be opened at the rate of about 600 a year through deaths, resignations, or other causes.

♦ Tacoma, Wash. The school board has changed its policy regarding school transportation, giving a contract to a private driver in place of the municipal belt line. The change has effected a saving of \$1,188 in transportation expenses.

♦ Huron, S. Dak. The school board has adopted a budget of \$173,215 for the school year 1933-34, which is a reduction of \$28,400 below the estimate for 1932-33.

♦ Milwaukee, Wis. The school-board finance committee has adopted a budget of \$8,935,133 for the school year 1933-34, which calls for a reduction of \$450,232 from the estimate of 1932-33. The largest saving will be in the construction fund, which provides \$120,000, as compared with \$400,000 which the board was entitled to request.

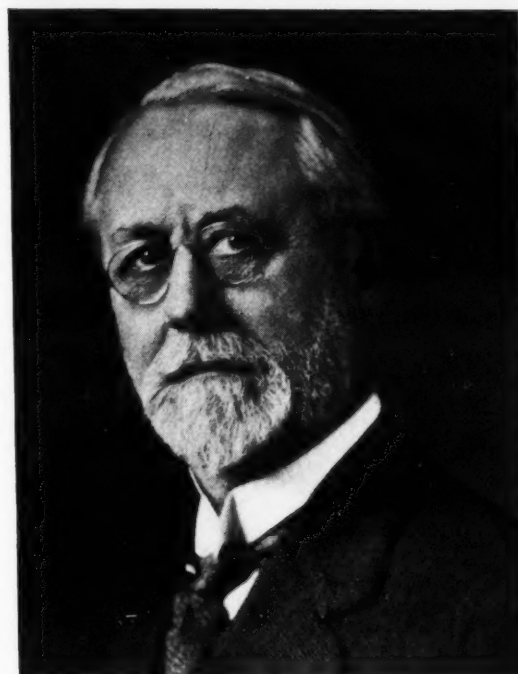
♦ Aberdeen, S. Dak. The school board has adopted a budget of \$286,849 for the school year 1933-34, which is \$35,487 less than the estimate for 1932-33. The large reduction was effected by decreases in teachers' salaries and supplies.

♦ Sioux City, Iowa. Under the rules of the school board, children whose birthdays fall within the first two weeks of school, September 5 to 16, inclusive, may be admitted to kindergarten. Pupils whose fifth birthdays fall between September 17 and October 4, inclusive, may enter, provided they pass a mental test which justifies their entrance. Pupils who are five and one-half years old should be normally entered in the senior kindergarten group. Children who do not enter school until they are six years of age must be placed in the junior first grade as an economy measure.

HALF CENTURY OF SCOTT, FORESMAN PROGRESS

The story of the educational publishing house of Scott, Foresman and Company is told in a neat booklet just issued. It covers a period of fifty years, and tells of the gradual building of an institution that has rendered a distinctive service to the cause of American education.

The booklet is a memorial to Erastus Howard Scott, the founder of the enterprise, who died in 1928 at the age of 74. Founded in the early Eighties as Albert, Scott & Co., the firm carried on a limited business. In 1894, Mr. Scott together with Hugh and Coates Fores-



THE LATE E. H. SCOTT.

founder and editor of Scott, Foresman and Company, in whose honor the firm has issued a commemorative book reviewing the progress of textbook making during the past fifty years.

man, formed the firm of the Scott, Foresman and Company. Hugh Foresman managed the fieldwork, while Coates looked after the financial management of the enterprise. Scott applied his genius as editor and publisher. It was he who determined upon the publication of the large list of textbooks brought out by the firm, which have been in many instances revolutionary in form and content.

The writer recalls E. H. Scott as a refined gentleman, courteous, unassuming, and scholarly. He also recalls the lovable Hugh Foresman, a genial companion and whirlwind business man. If Scott understood how to evolve significant new books, Hugh knew how to sell them. The combination proved an excellent one. Hugh Foresman has since learned to discover meritorious authorship as well as to market the product of his splendid firm.

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“Essential School Needs”

Yes, the Federal government will support your school needs if you will organize your argument and present it. Already applications of over 52 millions for schoolhouse projects have reached the State Advisory Boards. Advance estimates indicate that \$2,000,000 had been allotted by September 25th for school projects, from the \$3,300,000,000 funds available through the Federal Emergency Administration of Public Works.

But YOU must organize your argument. School people are in a peculiar daze due to school-budget retrenchments, and seem to be unable to grasp the possibilities of recovery. We are not the wild enthusiasts to suggest that “it’s all over” and recovery is at hand. We feel that the retrenchment in school work has had much purifying influence and we are all better for the experience.

But, Mr. School Executive, arouse yourself and wake up. It is not necessary that schools MUST trail so far behind the industrial recovery as to lose out. The President has suggested a road to recovery. *If your school plant is in need of essential repairs or additions, you can get them at once. If you are in need of a new school building you can get it, but you must bestir yourself, and initiative is your responsibility.*

Every October school board meeting ought to receive from the responsible school executive an expert statement on the adequacy, safety, and sanitation of your present school plant and its permanent equipment. Every school-board member ought to face the responsibility of a school plant that is decent and safe for the normal school program. Anything short of these standards should mark a system as out of step with present-day standards.

What are your “essential school needs”?

If you know them, tell Uncle Sam. If you don’t, find out quickly, if you want to help our NRA program in your community. Our status now is the old human problem — people don’t know, they don’t care, but they all sigh about the terrible depression and day dream about the feasibility of the NRA program.

As in all life, the reward will come to the city and the school system that has learned to help itself. We have learned to toddle educationally — let’s walk like Americans and step into line on the NRA recovery program.



Frank Bruce
Publisher

4 Star Performers



4 MACHINES . . . 4 ADVANCED FEATURES

Most striking development in the floor maintenance field during the current year has been the introduction of the "100 Series" **Finnell** — more handsome, more compact, more efficient — offering four distinct points of superiority:

★ Greater Power

Greater Power. More weight per square inch...short coupled wheel base...direct worm gear drive...General Electric Motor.

★ Increased Speed

Increased Speed. 230 brush revolutions per minute. Covers more square feet per minute.

★ New Flexibility

New Flexibility. Offset design . . . goes under chairs, desks, tables, etc. Dual use — interchangeable brush ring on No. 118, permits use on large areas such as corridors, gymnasiums, and slight adjustment adapts same machine to small areas, such as classrooms.

★ Unusual Silence

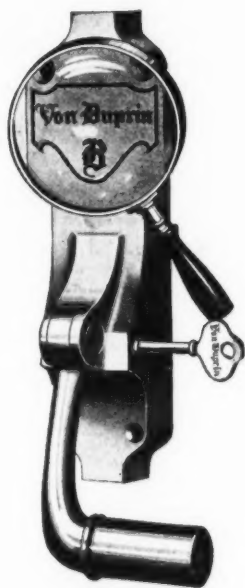
Unusual Silence. Gears are of heat-treated, hand-polished steel and bronze. Extra large grease case.

● Write for circular

Write for circular. Get the full details of this sensational new line of floor machines...the reasons for their moderate cost...their amazing performance. Address Finnell System, Inc., 810 East Street, Elkhart, Indiana. Canadian Distributor: Dustbane Products, Ltd., 207 Sparks Street, Toronto, Ontario.

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ELIMINATING UPKEEP COST

By the strength and durability of their working parts the old Type B (cast) Von Duprins set new records for low maintenance costs.

The new drop-forged devices are more than three times as strong, the exterior parts being forged under pressures up to 1,300,000 pounds, with the working members forged from bronze bearing metals having 175-225 Brinnell tests.

No one can say how long these new devices will wear, but we believe their life to be at least a century beyond that of any buildings now being erected.

During this long life, the denseness of the parts, their extreme resistance to wear, their close fit, insure the practical elimination of upkeep expense.

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